

Flood Risk Report

Knox County, Maine

Andrews Island, Town of Appleton, Bar Island, Birch Island, Brig Ledge, Town of Camden, Camp Cove Ledge, Camp Island (continued on next page)

Report Number 001 6/6/2014

Final





Project Area Community List

Community Name
Clam Ledges
Cresent Island
Township of Criehaven
Crow Island
Town of Cushing
Dix Island
East Goose Rock
Egg Rock
Fisherman Island
Flag Island
Town of Friendship
Goose Island
Gooseberry Knob
Graffam Island
Great Pond Island
Green Ledge
Herring Ledge
Hewett Island
High Island
High Ledge
Hog Island
Town of Hope
Town of Isle au Haut
Knox County
Large Green Island
Lasell Island
Little Green Island
Little Hurricane Island
Little Pond Island
Little Two Bush Island

Community Name
Malcolm Ledge
Marblehead Island
Mark Island
Matinicus Isle Plantation
Metinic Green Island
Metinic Island
Mink Island
Mouse Island
Township of Muscle Ridge
Nettle Island
Town of North Haven
Oak Island
Otter Island
Town of Owls Head
Pleasant Island
Pudding Island
Ragged Island
Robinson Rock
City of Rockland
Town of Rockport
Saddle Island
Town of Saint George
Seal Island
Shag Ledge
Town of South Thomaston
Spectacle Island
Tenpound Island
The Hogshead
The Nubble
Town of Thomaston

Project Area Community List (continued)

Community Name
Two Bush Island
Town of Union
Town of Vinalhaven
Town of Warren
Town of Washington
Wheaton Island
Wheeler Big Rock
Wooden Ball Island
Yellow Ledge

Community Name

Preface

The Department of Homeland Security (DHS), Federal Emergency Management Agency's (FEMA) Risk Mapping, Assessment, and Planning (Risk MAP) program provides states, tribes, and local communities with flood risk information and tools that they can use to increase their resilience to flooding and better protect their citizens. By pairing accurate floodplain maps with risk assessment tools and planning and outreach support, Risk MAP has transformed traditional flood mapping efforts into an integrated process of identifying, assessing, communicating, planning for, and mitigating flood-related risks.

This Flood Risk Report (FRR) provides non-regulatory information to help local or tribal officials, floodplain managers, planners, emergency managers, and others better understand their flood risk, take steps to mitigate those risks, and communicate those risks to their citizens and local businesses.

Because flood risk often extends beyond community limits, the FRR provides flood risk data for the entire Flood Risk Project as well as for each individual community. This also emphasizes that flood risk reduction activities may impact areas beyond jurisdictional boundaries.

Flood risk is always changing, and there may be other studies, reports, or sources of information available that provide more comprehensive information. The FRR is not intended to be regulatory or the final authoritative source of all flood risk data in the project area. Rather, it should be used in conjunction with other data sources to provide a comprehensive picture of flood risk within the project area.

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FLOOD RISK REPORT

1 Introduction

1.1 About Flood Risk

Floods are naturally occurring phenomena that can and do happen almost anywhere. In its most basic form, a flood is an accumulation of water over normally dry areas. Floods become hazardous to people and property when they inundate an area where development has occurred, causing losses. Mild flood losses may have little impact on people or property, such as damage to landscaping or the generation of unwanted debris. Severe flooding can destroy buildings, ruin crops, and cause critical injuries or death.

Flooding is a natural part of our world and our communities.
Flooding becomes a significant hazard, however, when it intersects with the built environment.

1.1.1 Calculating Flood Risk

It is not enough to simply identify where flooding may occur. Just because one knows where a flood occurs does not mean they know the risk of flooding. The most common method for determining flood risk, also referred to as vulnerability, is to identify the probability of flooding and the consequences of flooding. In other words:

- Flood Risk (or Vulnerability) = Probability x Consequences; where
- **Probability** = the likelihood of occurrence
- Consequences = the estimated impacts associated with the occurrence

The probability of a flood is the likelihood that a flood will occur. The probability of flooding can change based on physical, environmental, and/or contributing engineering factors. Factors affecting the probability that a flood will impact an area range from changing weather patterns to the existence of mitigation projects. The ability to assess the probability of a flood and the level of accuracy for that assessment are also influenced by modeling methodology advancements, better knowledge, and longer periods of record for the water body in question.

The consequences of a flood are the estimated impacts associated with the flood occurrence. Consequences relate to humans activities within an area and how a flood impacts the natural and built environments.

1.1.2 Risk MAP Flood Risk Products

Through Risk MAP, FEMA provides communities with updated Flood Insurance Rate Maps (FIRMs) and Flood Insurance Studies (FISs) that focus on the probability of floods and that show where flooding may occur as well as the calculated 1% annual chance flood elevation. The 1% annual chance flood, also known as the base flood, has a 1% chance

Which picture below shows more flood risk?





Even if you assume that the flood in both pictures was the same probability—let's say a 10-percent-annual-chance flood—the consequences in terms of property damage and potential injury as a result of the flood in the bottom picture are much more severe. Therefore, the flood risk in the area shown in the bottom picture is higher.

of being equaled or exceeded in any given year. FEMA understands that flood risk is dynamic—that flooding does not stop at a line on a map—and as such, provides the following flood risk products:

- Flood Risk Report (FRR): The FRR presents key risk analysis data for the Flood Risk Project.
- Flood Risk Map (FRM): Like the example found in Section 3.1 of this document, the FRM shows a variety of flood risk information in the project area. More information about the data shown on the FRM may be found in Section 2 of this report.
- Flood Risk Database (FRD): The FRD is in GIS format and houses the flood risk data developed during the course of the flood risk analysis that can be used and updated by the community. After the Flood Risk Project is complete, this data can be used in many ways to visualize and communicate flood risk within the Flood Risk Project.

These Flood Risk Products provide flood risk information at both the Flood Risk Project level and community level (for those portions of each community within the Flood Risk Project). They demonstrate how decisions made within a Flood Risk Project can impact properties downstream, upstream, or both. Community-level information is particularly useful for mitigation planning and emergency management activities, which often occur at a jurisdictional level.

Whether or not an area might flood is one consideration. The extent to which it might flood adds a necessary dimension to that understanding.

1.2 Uses of this Report

The goal of this report is to help inform and enable communities and tribes to take action to reduce flood risk. Possible users of this report include:

- Local elected officials
- Floodplain managers
- Community planners
- Emergency managers
- Public works officials
- Other special interests (e.g., watershed conservation groups, environmental awareness organizations, etc.)

State, local, and tribal officials can use the summary information provided in this report, in conjunction with the data in the FRD, to:

Update local hazard mitigation plans. As required by the 2000
Federal Stafford Act, local hazard mitigation plans must be updated
at least every five (5) years. Summary information presented in
Section 3 of this report and the FRM can be used to identify areas
that may need additional focus when updating the risk assessment
section of a local hazard mitigation plan. Information found in

Section 4 pertains to the different mitigation techniques and programs and can be used to inform decisions related to the mitigation strategy of local plans.

- Update community comprehensive plans. Planners can use flood risk information in the development and/or update of comprehensive plans, future land use maps, and zoning regulations. For example, zoning codes may be changed to better provide for appropriate land uses in high-hazard areas.
- Update emergency operations and response plans. Emergency
 managers can identify low-risk areas for potential evacuation and
 sheltering and can help first responders avoid areas of high-depth
 flood water. Risk assessment results may reveal vulnerable areas,
 facilities, and infrastructure for which planning for continuity of
 operations plans (COOP), continuity of government (COG) plans,
 and emergency operations plans (EOP) would be essential.
- Develop hazard mitigation projects. Local officials (e.g., planners and public works officials) can use flood risk information to reevaluate and prioritize mitigation actions in local hazard mitigation plans.
- Communicate flood risk. Local officials can use the information in this report to communicate with property owners, business owners, and other citizens about flood risks, changes since the last FIRM, and areas of mitigation interest. The report layout allows community information to be extracted in a fact sheet format.
- Inform the modification of development standards. Floodplain managers, planners, and public works officials can use information in this report to support the adjustment of development standards for certain locations. For example, heavily developed areas tend to increase floodwater runoff because paved surfaces cannot absorb water, indicating a need to adopt or revise standards that provide for appropriate stormwater retention.

The Flood Risk Database, Flood Risk Map, and Flood Risk Report are "non-regulatory" products. They are available and intended for community use but are neither mandatory nor tied to the regulatory development and insurance requirements of the National Flood Insurance Program (NFIP). They may be used as regulatory products by communities if authorized by state and local enabling authorities.

1.3 Sources of Flood Risk Assessment Data Used

To assess potential community losses, or the consequences portion of the "risk" equation, the following data is typically collected for analysis and inclusion in a Flood Risk Project:

Information about local assets or resources at risk of flooding



Vulnerability of infrastructure is another important consideration.



Flooding along the Wabash River in Clark County, Illinois, contributed to a federal disaster declaration on June 24, 2008.

- Information about the physical features and human activities that contribute to that risk
- Information about where the risk is most severe
- For most Flood Risk Projects, FEMA uses the following sources of flood risk information to develop this report:
- Hazus estimated flood loss information
- New engineering analyses (e.g., hydrology and hydraulic modeling) to develop new flood boundaries
- Locally supplied data (see Section 7 for a description)
- Sources identified during the Discovery process

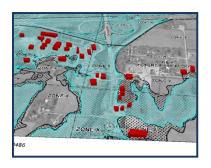
1.4 Related Resources

For a more comprehensive picture of flood risk, FEMA recommends that state and local officials use the information provided in this report in conjunction with other sources of flood risk data, such as those listed below.

- FIRMs and FISs. This information indicates areas with specific flood hazards by identifying the limit and extent of the 1-percent-annual-chance floodplain and the 0.2-percent-annual-chance floodplain. FIRMs and FIS Reports do not identify all floodplains in a Flood Risk Project. The FIS Report includes summary information regarding other frequencies of flooding, as well as flood profiles for riverine sources of flooding. In rural areas and areas for which flood hazard data are not available, the 1-percent-annual-chance floodplain may not be identified. In addition, the 1-percent-annual-chance floodplain may not be identified for flooding sources with very small drainage areas (less than 1 square mile).
- Hazus Flood Loss Estimation Reports. Hazus can be used to generate reports, maps and tables on potential flood damage that can occur based on new/proposed mitigation projects or future development patterns and practices. Hazus can also run specialized risk assessments, such as what happens when a dam or levee fails. Flood risk assessment tools are available through other agencies as well, including the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Army Corps of Engineers (USACE). Other existing watershed reports may have a different focus, such as water quality, but may also contain flood risk and risk assessment information. See Section 6 for additional resources.
- Flood or multi-hazard mitigation plans. Local hazard mitigation
 plans include risk assessments that contain flood risk information
 and mitigation strategies that identify community priorities and
 actions to reduce flood risk. This report was informed by any
 existing mitigation plans in the Flood Risk Project.







FEMA data can be leveraged to identify and measure vulnerability by including local building information (i.e. building type). The examples above show various ways to display flooding intersecting with buildings.

• **FEMA Map Service Center (MSC)**. The MSC has useful information, including fly sheets, phone numbers, data, etc. Letters of Map Change are also available through the MSC. The user can view DFIRM databases and the National Flood Hazard Layer (NFHL) Database.

2 Flood Risk Analysis

2.1 Overview

Flood hazard identification uses FIRMs, and FIS Reports identify where flooding can occur along with the probability and depth of that flooding. Flood risk assessment is the systematic approach to identifying how flooding impacts the environment. In hazard mitigation planning, flood risk assessments serve as the basis for mitigation strategies and actions by defining the hazard and enabling informed decision making. Fully assessing flood risk requires the following:

- Identifying the flooding source and determining the flood hazard occurrence probability
- Developing a complete profile of the flood hazard including historical occurrence and previous impacts
- Inventorying assets located in the identified flood hazard area
- Estimating potential future flood losses caused by exposure to the flood hazard area

Flood risk analyses are different methods used in flood risk assessment to help quantify and communicate flood risk. Flood risk analysis can be performed on a large scale (state, community) level and on a very small scale (parcel, census block). Advantages of large-scale flood risk analysis, especially at the watershed level, include identifying how actions and development in one community can affect areas up- and downstream. On the parcel or census block level, flood risk analysis can provide actionable data to individual property owners so they can take appropriate mitigation steps.

2.2 Analysis of Risk

The FRR, FRM, and FRD contain a variety of flood risk analysis information to help describe and visualize flood risk within the project area. Depending on the scope of the Flood Risk Project for this project area, this information may include some or all of the following elements:

- Changes Since Last FIRM
- Water Surface, Flood Depth, and Analysis Grids
- Flood Risk Assessment Information
- Areas of Mitigation Interest

2.2.1 Changes Since Last FIRM

The Changes Since Last FIRM (CSLF) dataset, stored in the FRD and shown in Section 3 of this report, illustrates where changes to flood risk





Flooding impacts non-populated areas too, such as agricultural lands and wildlife habitats.

State and Local Hazard
Mitigation Plans are required to
have a comprehensive allhazard risk assessment. The
flood risk analyses in the FRR,
FRM, and FRD can inform the
flood hazard portion of a
community's or state's risk
assessment. Further, data in
the FRD can be used to
develop information that meets
the requirements for risk
assessments as it relates to the
hazard of flood in hazard
mitigation plans.

may have occurred since the last FIRM was published for the subject area. Communities can use this information to update their mitigation plans, specifically quantifying "what is at risk" and identifying possible mitigation activities.

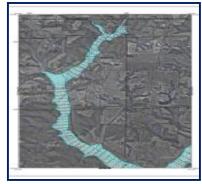
The CSLF dataset identifies changes in the Special Flood Hazard Area (SFHA) and floodway boundary changes since the previous FIRM was developed. These datasets quantify land area increases and decreases to the SFHA and floodway, as well as areas where the flood zone designation has changed (e.g., Zone A to AE, AE to VE, shaded Zone X protected by levee to AE for de-accredited levees).

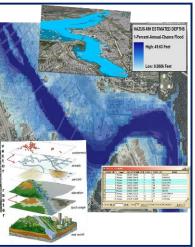
The CSLF dataset is created in areas that were previously mapped using digital FIRMs. The CSLF dataset for this project area includes:

- Floodplain and/or Floodway Boundary Changes: Any changes to the existing floodplain or floodway boundaries are depicted in this dataset
- Floodplain Designation Changes: This includes changed floodplain designations (e.g., Zone A to Zone AE).
- CSLF Information: Within this dataset additional information is provided to help explain the floodplain and floodway boundary changes shown on the FIRM. This information is stored as digital attributes within the CSLF polygons and may include some or all of the following:
 - Changes in peak discharges
 - Changes to the modeling methodology (e.g., tide gage analysis)
 - New flood control structures (e.g., dams, levees, etc.)
 - Changes to hydraulic structures (e.g., bridges, culverts, etc.)
 - Sedimentation and/or Erosion
 - Man-made changes to a watercourse (e.g., realignment or improvement)

It should be noted that reasons for the floodplain and floodway changes (also known as Contributing Engineering Factors) are intended to give the user a general sense of what caused the change, as opposed to providing a reason for each and every area of change.

- Count of Affected Structures: The total estimated count of affected buildings within the area of change. The data is only made available because the local jurisdiction was able to provide accurate building footprint data indicating the location of structures in and adjacent to the identified floodplains).
- **Count of Affected Population**: The total estimated affected population within the area of change. The data is only made





Floodplain maps have evolved considerably from the older paperbased FIRMs to the latest digital products and datasets.

CSLF data can be used to communicate changes in the physical flood hazard area (size, location) as part of the release of new FIRMS. It can also be used in the development or update of hazard mitigation plans to describe changes in hazard as part of the hazard profile.

CSLF data is shown in the FRR, and underlying data is stored in the FRD.

available because the local jurisdiction was able to provide population data that accompanied the structure data noted above.

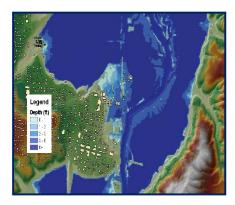
2.2.2 Flood Depth and Analysis Grids

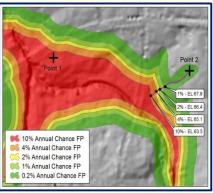
Grids are FEMA datasets provided in the FRD to better describe the risk of the flood hazard. While the FIRM and FIS Report describe "what" is at risk by identifying the hazard areas, water surface, flood depth, and analysis grids can help define "how bad" the risk is within those identified areas. These grids are intended to be used by communities for additional analysis, enhanced visualization, and communication of flood risks for hazard mitigation planning and emergency management. Grids provided in the FRD for this project area include the following:

• Flood Depth Grids: (for the calculated flood frequencies included in the FIS Report): Flood Depth Grids are created for each flood frequency calculated during the course of a Flood Risk Project. These grids communicate flood depth as a function of the difference between the calculated water surface elevation and the ground. Five grids will normally be delivered for riverine areas for the standard flood frequencies (10-, 4-, 2-, 1-, and 0.2-percentannual-chance). Coastal areas only receive the 1-percent-annual-chance grid.

Depth grids form the basis for refined Hazus loss estimates (as presented in a table in Section 3 of this report) and are used to calculate potential flood losses for display on the FRM and for tabular presentation in this report. Depth grids may also be used for a variety of ad-hoc risk visualization and mitigation initiatives.

- Percent Annual Chance of Flooding Grid: This is a grid dataset that represents the percent annual chance of flooding for locations along a flooding source. This grid uses the five standard flood frequencies.
- Percent 30-Year Chance of Flooding Grid: This is a grid dataset that
 represents the estimated likelihood of flooding at least once within
 a 30-year period, which is the average lifespan for a home
 mortgage, for all locations within the extent of the 1-percentannual-chance and 0.2-percent-annual-chance floodplain.
- Water Surface Elevation Change Grid: This dataset provides the ability to see vertical changes in the water surface elevation between the existing FIRM and the revised FIRM. This dataset would be the equivalent of the CSLF dataset, but as a vertical analysis as opposed to a horizontal analysis since last FIRM.
- Water Surface Elevation Grids: This dataset represents the raw results of the hydrologic and hydraulic analysis before adjustments are made to account for influences associated with other flooding sources.





Grid data can make flood mapping more informative. The top image is a flood depth grid showing relative depths of water in a scenario flood event. The bottom image is a percent annual chance of flooding grid, which shows inundation areas of various frequency floods.

- 1-Percent Plus Flood Depth Grid: This riverine-only dataset communicates the inherent uncertainty associated with the 1percent-annual-chance flood elevation band by highlighting the areas subject to inundation by the upper limit of the 1-percentannual-chance flood discharge confidence interval.
- Velocity Grid: This dataset describes the average flood velocity that occurs within the floodplain. Velocity grids can be used to increase public awareness of flood hazards associated with rapidly moving floodwaters.
- Water Surface and/or Depth Grids Based on Additional Flood Frequencies: In addition to the standard flood frequencies referenced above, this dataset is provided when additional flood frequencies are calculated, such as a 20-percent-annual-chance (5-year) or 0.5-percent-annual-chance (200-year) event.

2.2.3 Estimated Flood Loss Information

Flood loss estimates provided in the FRR were developed using a FEMA flood loss estimation tool, Hazus. Originally developed for earthquake risk assessment, Hazus has evolved into a multi-hazard tool developed and distributed by FEMA that can provide loss estimates for floods, earthquakes, and hurricane winds. Hazus is a nationally accepted, consistent flood risk assessment tool to assist individuals and communities to create a more accurate picture of flood risk. Some benefits of using Hazus include the following:

- Outputs that can enhance state and local mitigation plans and help screen for cost-effectiveness in FEMA mitigation grant programs
- Analysis refinement through updating inventory data and integrating data produced using other flood models
- Widely available support documents and networks (Hazus Users Groups)

Files from the FRD can be imported into Hazus to develop other risk assessment information including:

- Debris generated after a flood event
- Dollar loss of the agricultural products in a study region
- Utility system damages in the region
- Vehicle loss in the study region
- Damages and functionality of lifelines such as highway and rail bridges, potable water, and wastewater facilities

Scenario-Based Flood Loss Estimates:

Scenario-based flood losses have been calculated using Hazus for the 10-, 4-, 2-, 1-, and 0.2-percent-annual-chance flood events. In this

Grid data can be used to communicate the variability of floodplains, such as where floodplains are particularly deep or hazardous, where residual risks lie behind levees, and where losses may be great after a flood event. For mitigation planning, grid data can inform the hazard profile and vulnerability analysis (what is at risk for different frequencies) and can be used for preliminary benefit-cost analysis screening. For floodplain management, higher regulatory standards can be developed in higher hazard flood prone areas (i.e., 10-percent-chance floodplains or deep floodplains).

Grid data is stored in the FRD, and a list of available grid data is provided in the FRR. Visualizations of grids (maps) are not provided.

report, these losses are expressed in dollar amounts and are provided for the Flood Risk Project area only, even though results are shown for the entire watershed and at the local jurisdiction level.

Loss estimates are based on best available data, and the methodologies applied result in an approximation of risk. These estimates should be used to understand relative risk from flood and potential losses. Uncertainties are inherent in any loss estimation methodology, arising in part from approximations and simplifications that are necessary for a comprehensive analysis (e.g., incomplete inventories, demographics, or economic parameters).

Flood loss estimates are being provided at the project and community levels for multiple flood frequencies including:

- Residential Asset Loss: These include direct building losses
 (estimated costs to repair or replace the damage caused to the
 building) for all classes of residential structures including single
 family, multi-family, manufactured housing, group housing, and
 nursing homes. This value also includes content losses.
- Commercial Asset Loss: These include direct building losses for all classes of commercial buildings including retail, wholesale, repair, professional services, banks, hospitals, entertainment, and parking facilities. This value also includes content and inventory losses.
- Other Asset Loss: This includes losses for facilities categorized as industrial, agricultural, religious, government, and educational. This value also includes content and inventory losses.
- Essential Facility Losses: Essential facilities are defined in Hazus
 as facilities which provide services to the community and should
 be functional after a flood, including schools, police stations,
 fire stations, medical facilities, and emergency operation
 centers. These facilities would otherwise be considered critical
 facilities for mitigation planning purposes. Estimated damages
 (in terms of loss of function) for essential facilities are
 determined on a site-specific basis according to latitude and
 longitude. For this report, Hazus calculates the types and
 numbers of essential facilities impacted.
- Infrastructure: For analysis of infrastructure, Hazus supports the
 analysis of transportation systems and lifeline utility systems.
 Transportation systems include highways, railways, light
 railways, busses, ports and harbors, ferries, and airport systems.
 Utility systems include potable water systems, wastewater, oil,
 natural gas, electric power, and communication systems. For
 this report, Hazus calculates the types of infrastructure
 impacted.



Hazus is a loss estimation methodology developed by FEMA for flood, wind, and earthquake hazards. The methodology and data established by Hazus can also be used to study other hazards. Hazus is a loss estimation methodology developed by FEMA for flood, wind, and earthquake hazards. The methodology and data established by Hazus can also be used to study other hazards.

- Business Disruption: This includes the losses associated with the inability to operate a business due to the damage sustained during the flood. Losses include inventory, income, rental income, wage, and direct output losses, as well as relocation costs.
- Annualized Losses: Annualized losses are calculated using Hazus by taking losses from multiple events over different frequencies and expressing the long-term average by year. This factors in historic patterns of frequent smaller floods with infrequent but larger events to provide a balanced presentation of flood damage.
- Loss Ratio: The loss ratio expresses the scenario losses divided by the total building value for a local jurisdiction and can be a gage to determine overall community resilience as a result of a scenario event. For example, a loss ratio of 5 percent for a given scenario would indicate that a local jurisdiction would be more resilient and recover more easily from a given event, versus a loss ratio of 75 percent which would indicate widespread losses. An annualized loss ratio uses the annualized loss data as a basis for computing the ratio. Loss ratios are not computed for business disruption. These data are presented in the FRR.
- Hazus Flood Risk Value: On the FRM, flood risk is expressed in the following five categories: very low, low, medium, high, and very high for census blocks that have flood risk. It is based on the 1-percent-annual-chance total asset loss by census block.

2.2.4 Areas of Mitigation Interest

Many factors contribute to flooding and flood losses. Some are natural, and some are not. In response to these risks, there has been a focus by the federal government, state agencies, and local jurisdictions to mitigate properties against the impacts of flood hazards so that future losses and impacts can be reduced. An area identified as an Area of Mitigation Interest (AoMI) is an important element of defining a more comprehensive picture of flood risk and mitigation activity in a watershed, identifying target areas and potential projects for flood hazard mitigation, encouraging local collaboration, and communicating how various mitigation activities can successfully reduce flood risk.

This report and the FRM may include information that focuses on identifying Areas of Mitigation Interest that may be contributing (positively or negatively) to flooding and flood losses in the Flood Risk Project. AoMIs are identified through coordination with local stakeholders; through revised hydrologic and hydraulic and/or coastal analyses; by leveraging other studies or previous flood studies; from community mitigation plans, floodplain management plans, and local surveys; and from the mining of federal government databases (e.g.,

Hazus-estimated loss data can be used in many ways to support local decision making and explanation of flood risk. For mitigation planning purposes, loss data can be used to help meet requirements to develop loss information for the hazard of flood. Also, the FRM can show where flood risk varies by geographic location. For emergency management, Hazus data can help forecast losses based on predicted events, and resources can be assigned accordingly. Loss information can support floodplain management efforts, including those to adopt higher regulatory standards. Also. awareness of exposed essential facilities and infrastructure encourages mitigation actions to protect citizens from service disruption should flooding occur.

Hazus estimated loss data is summarized in the FRR and on the FRM and stored in the FRD. flood claims, disaster grants, and data from other agencies). Below is a list of the types of Areas of Mitigation Interest that may be identified in this Flood Risk Report, shown on the Flood Risk Map, and stored in the Flood Risk Database:

Dams

A dam is a barrier built across a waterway for impounding water. Dams vary from impoundments that are hundreds of feet tall and contain thousands of acre-feet of water (e.g., Hoover Dam) to small dams that are a few feet high and contain only a few acre-feet of water (e.g., small residential pond). "Dry dams," which are designed to contain water only during floods and do not impound water except for the purposes of flood control, include otherwise dry land behind the dam.

While most modern, large dams are highly engineered structures with components such as impervious cores and emergency spillways, most smaller and older dams are not. State dam safety programs emerged in the 1960s, and the first Federal Guidelines for Dam Safety were not prepared until 1979. By this time, the vast majority of dams in the United States had already been constructed.



Dams vary in size and shape, the amount of water they impound, and their assigned hazard classification.

Reasons dams are considered AoMIs:

- Many older dams were not built to any particular standard and thus may not withstand extreme rainfall events. Older dams in some parts of the country are made out of an assortment of materials. These structures may not have any capacity to release water and could be overtopped, which could result in catastrophic failure.
- Even dams that follow current dam safety programs may not be regulated, as downstream risk may have changed since the dam was constructed. Years after a dam is built, a house, subdivision, or other development may be constructed in the area downstream of the dam. Thus, a subsequent dam failure could result in damage. Since these dams are not regulated, it is impossible to predict how safe they are.
- A significant dam failure risk is structural deficiencies associated with older dams that are not being adequately addressed today through needed inspection/maintenance practices.
- For larger dams a flood easement may have been obtained on a property. However, there may have been buildings constructed in violation of the flood easement.
- When a new dam is constructed, the placement of such a large volume of material in a floodplain area (if that is the dam location) will displace flood waters and can alter how



This dam failure caused flooding that damaged several homes and vehicles.

- the watercourse flows. This can result in flooding upstream, downstream, or both.
- For many dams, the dam failure inundation zone is not known. Not having knowledge of these risk areas could lead to unprotected development in these zones.

• Levees and Major Embankments

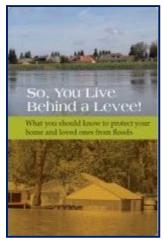
FEMA defines a levee as "a man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding." Levees are sometimes referred to as dikes. Soil used to construct a levee is compacted to make the levee as strong and stable as possible. To protect against erosion and scouring, levees can be covered with everything from grass and gravel to harder surfaces like stone (riprap), asphalt, or concrete.

Similar to dams, levees have not been regulated in terms of safety and design standards until relatively recently. Many older levees were constructed in a variety of ways, from a farmer piling dirt along a stream to prevent nuisance flooding to levees made out of old mining spoil material. As engineered structures, levees are designed to a certain height and can fail if a flood event is greater than anticipated.

A floodwall is a vertical wall that is built to provide protection from a flood in a similar manner as a levee. Typically made of concrete or steel, floodwalls often are erected in urban locations where there is not enough room for a levee. Floodwalls are sometimes constructed on a levee crown to increase the levee's height.

Most new dams and levees are engineered to a certain design standard. If that design is exceeded, they could be overtopped and fail catastrophically, causing more damage than if the levee was not there in the first place. Few levees anywhere in the nation are built to more than a 1-percent-annual-chance flood protection rating, and the areas behind them are still at some risk for flooding. This threat is called residual risk. In some states, residual risk areas can extend up to 15 miles from a riverbank. Although the probability of flooding may be lower because a levee exists, risk is nonetheless still present. The American Society of Civil Engineers' publication "So, You Live Behind a Levee!" provides an in-depth explanation of levee and residual risk.

Major embankments, on the other hand, are rarely designed with any flood protection level in mind. Railroads, road abutments, and canals—especially in the Western United States—are not considered levees or dams and have issues such as unknown construction materials/methods. These embankments are not regulated from a flood risk standpoint.



For more information about the risks associated with living behind levees, consult the publication "So, You Live Behind a Levee!" published by the American Society of Civil Engineers at http://content.asce.org/ASC ELeveeGuide.html.

Reasons levees and major embankments are considered AoMIs:

- Like dams, many levees in the United States were constructed using unknown techniques and materials. These levees have a higher failure rate than those that have been designed to today's standards.
- A levee might not provide the flood risk reduction it once did as a result of flood risk changes over time. Flood risk can change due to a number of factors, including increased flood levels due to climate change or better estimates of flooding, development in the watershed increasing flood levels and settlement of the levee or floodwall, and sedimentation in the levee channel. Increased flood levels mean decreased flood protection. The lack of adequate maintenance over time will also reduce the capability of a levee to contain the flood levels for which it was originally designed.
- Given enough time, any levee will eventually be overtopped or damaged by a flood that exceeds the levee's capacity. Still, a widespread public perception of levees is that they will always provide protection. This perception may lead to not taking mitigation actions such as purchasing flood insurance.
- ➤ A levee is a system that can fail due to its weakest point, and therefore maintenance is critical. Many levees in the United States are poorly maintained or not maintained at all. Maintenance also includes maintaining the drainage systems behind the levees so they can keep the protected area dry.

Coastal Structures

Coastal structures are used to "harden" the shoreline for a variety of purposes and include:

- Jetties: Structures constructed to direct currents or accommodate vessels.
- Groynes: Protective structures of stone or concrete that extend from shore into the water to prevent a beach from washing away.
- Sea walls: A form of hard and strong coastal defense constructed on the inland part of a coast to reduce the effects of strong waves.
- As the rate of sea level rise accelerates, an increase in coastal erosion is likely. We are now facing rapid sea level changes on a scale of decades. Higher sea levels could affect the coastal zone





Canal levee breaches as a result of Hurricane Katrina in New Orleans in 2005. Note damages can be more extensive due to high velocity flood flows than if the levee was not there.

and accelerate coastal erosion and flooding in a variety of ways, including greater shoreline retreat; increased coastal erosion rates; property destruction; and saltwater intrusion into bays, rivers, and underground water resources. In addition, a general elevation in the water table due to sea level rise will result.

Reasons coastal structures are considered AoMIs:

- While coastal structures or "hardening of the shoreline" may provide a temporary level of flood reduction for a very specific site, it also interrupts the dynamic processes of the littoral flow (flow along the coastline) which results in accelerated coastal erosion.
- Erosion often occurs along beaches during storms, especially severe storms that stay offshore for days and result in ongoing battering of the shoreline through high wind and waves. As the beach erodes, vulnerable properties are placed at even greater risk to coastal flooding, storm surge, wave heights, wave run up, and coastal erosion.
- Higher water tables associated with sea level rise could lead to the failure of septic systems and other drainage systems, such as storm drains, which need to be located at a certain elevation above the water table. Elevation of the water table would also affect the river drainage systems by affecting the rate of infiltration and increasing the amount of runoff which would, in turn, increase the risk of flooding.

Stream Flow Constrictions

A stream flow constriction occurs when a human-made structure, such as a culvert or bridge, constricts the flow of a river or stream. The results of this constriction can be increased damage potential to the structure, an increase in velocity of flow through the structure, and the creation of significant ponding or backwater upstream of the structure. Regulatory standards regarding the proper opening size for a structure spanning a river or stream are not consistent and may be non-existent. Some local regulations require structures to pass a volume of water that corresponds to a certain size rain event; however, under sizing, these openings can result in flood damage to the structure itself. After a large flood event, it is not uncommon to have numerous bridges and culverts "washed out."

Reasons stream flow constrictions are considered AoMIs:

- Stream flow constrictions can back water up on property upstream of the structure if not designed properly.
- These structures can accelerate the flow through the structure causing downstream erosion if not properly mitigated. This erosion can affect the structure itself, causing undermining and failure.



Severe beach erosion and damage resulting from a nor'easter.

- ➤ If the constriction is a bridge or culvert, it can get washed out causing an area to become isolated and potentially more difficult to evacuate.
- Washed-out culverts and associated debris can wash downstream and cause additional constrictions.

At-Risk Essential Facilities

Essential facilities, sometimes called "critical facilities," are those whose impairment during a flood could cause significant problems to individuals or communities. For example, when a community's wastewater treatment is flooded and shut down, not only do contaminants escape and flow into the floodwaters, but backflows of sewage can contaminate basements or other areas of the community. Similarly, when a facility such as a hospital is flooded, it can result in a significant hardship on the community not only during the event but long afterwards as well.

Reasons at-risk essential facilities are considered AoMIs:

- Costly and specialized equipment may be damaged and need to be replaced.
- Impairments to facilities such as fire stations may result in lengthy delays in responding and a focus on evacuating the facility itself.
- Critical records and information stored at these facilities may be lost.

Past Flood Insurance Claims and Individual Assistance/Public Assistance Hotspots

Assistance provided after flood events (flood insurance in any event and Individual Assistance [IA] or Public Assistance [PA] after declared disasters) occurs in flood affected areas. Understanding geographically where this assistance is being provided may indicate unique flood problems.

Flood insurance claims are not always equally distributed in a community. Although estimates indicate that 20 to 50 percent of structures in identified flood hazard areas have flood insurance, clusters of past claims may indicate where there is a flood problem. However, clusters of past claims and/or areas where there are high payments under FEMA's IA or PA Programs may indicate areas of significant flood hazard.

Reasons past claim hotspots are considered AoMIs:

A past claim hotspot may reflect an area of recent construction (large numbers of flood insurance policies as a result of a large number of mortgages) and an area where



Clusters of past flood insurance claims can show where there is a repetitive flood problem.

- the as-built construction is not in accordance with local floodplain management regulations.
- Sometimes clusters of past claims occur in subdivisions that were constructed before flood protection standards were in place, places with inadequate stormwater management systems, or in areas that may not have been identified as SFHAs.
- Clusters of IA or PA claims may indicate areas where high flood insurance coverage or other mitigation actions are needed.

Areas of Significant Land Use Change

Development, whether it is a 100-lot subdivision or a single lot big box commercial outlet, can result in large amounts of fill and other material being deposited in flood storage areas, thereby increasing flood hazards downstream.

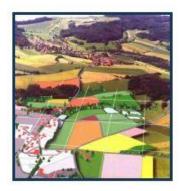
Additionally, when development occurs, hard surfaces such as parking lots, buildings and driveways do not allow water to absorb into the ground, and more of the rainwater becomes runoff flowing directly into streams. As a result, the "peak flow" in a stream after a storm event will be higher and will occur faster. Without careful planning, major land use changes can affect the impervious area of a site and result in a significant increase in flood risk caused by streams that cannot handle the extra storm water runoff.

Sometimes a major land use change may be for planning purposes only. For example, a land use change that rezones land from a classification such as floodplain that restricts development to a zone such as industrial or high density residential could result in significant new infrastructure and structures in high flood risk areas.

Reasons Areas of Significant Land Use Change are considered AoMIs:

- Development in areas mapped SFHA reduces flood storage areas, which can make flooding worse at the development site and downstream of it.
- Impervious surfaces speed up the water flowing in the streams, which can increase erosion and the danger that fast-flowing floodwaters pose to people and buildings.
- Rezoning flood-prone areas to high densities and/or higher intensity uses can result in more people and property at risk of flooding and flood damage.

Key Emergency Routes Overtopped During Frequent Flooding Events





Rooftops, pavements, patios, and driveways contribute to the impervious area in a watershed. This occurs in both urban areas and rural areas being developed.

Roads are not always elevated above estimated flood levels, and present a significant flood risk to motorists during flooding events. When alternate routes are available, risks may be reduced, including risks to life and economic loss.

Reasons overtopped roads are considered AoMIs:

- Such areas, when identified, can be accounted for and incorporated into Emergency Action Plans.
- Roads may be elevated or reinforced to reduce the risk of overtopping during flood events.

Drainage or Stormwater-Based Flood Hazard Areas, or Areas Not Identified as Floodprone on the FIRM But Known to Be Inundated

Flood hazard areas exist everywhere. While FEMA maps many of these, others are not identified. Many of these areas may be located in communities with existing, older, and often inadequate stormwater management systems or in very rural areas. Other similar areas could be a result of complex or unique drainage characteristics. Even though they are not mapped, awareness of these areas is important so adequate planning and mitigation actions can be performed.

Reasons drainage or stormwater-based flood hazard areas or unidentified floodprone locations are considered AoMIs:

- So further investigation of such areas can occur and, based on scientific data, appropriate mitigation actions can result (i.e., land use and building standards).
- ➤ To create viable mitigation project applications in order to reduce flood losses.

Areas of Mitigation Success

Flood mitigation projects are powerful tools to communicate the concepts of mitigation and result in more resilient communities. Multiple agencies have undertaken flood hazard mitigation actions for decades. Both structural measures—those that result in flood control structures—and non-structural measures have been implemented in thousands of communities. An extensive list of mitigation actions can be found in Section 4.

Reasons areas of mitigation success are considered AoMIs:

- Mitigation successes identify those areas within the community that have experienced a reduction or elimination of flood risk.
- Such areas are essential in demonstrating successful loss reduction measures and in educating citizens and officials on available flood hazard mitigation techniques.



When large highways close due to flooding, traffic is detoured causing inconvenience and economic loss.

Avoided losses can be calculated and shown.

Areas of Significant Riverine or Coastal Erosion

Stream channels and coastlines are constantly subject to the forces of erosion. Areas of erosion (stream or coastal) threaten infrastructure, general building stock, and businesses, and also pose a threat to human life.

Reasons why areas of significant riverine or coastal erosion are considered AoMIs:

- A community may wish to avoid development in areas identified as subject to erosion hazards.
- Riverine flood damage assessments generally consider inundation alone.
- Landslides and mudslides are a result of erosion.
- ➤ Bank erosion caused by within channel flows is not recognized as a significant hazard in Federal floodplain management regulations.
- Riverine and coastal erosion can undercut structures and roads, causing instability and possible collapse.
- Approximately one-third of the nation's streams experience severe erosion problems.

Other

Other types of flood risk areas include drainage or stormwaterbased flood hazard areas, or areas known to be inundated during storm events.

3 Flood Risk Analysis Results

The following pages provide summary flood risk results for the Flood Risk Project as follows:

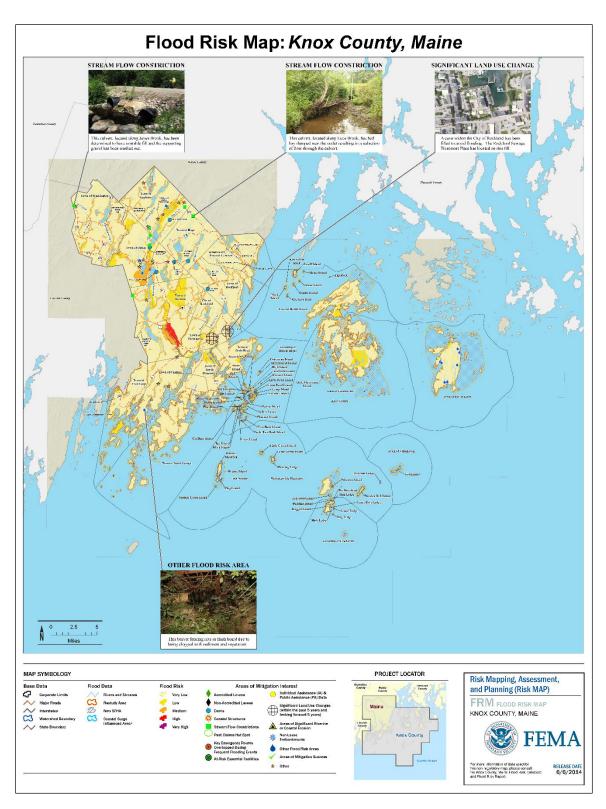
Flood Risk Map (FRM). Within the Flood Risk Project the FRM displays base data reflecting community boundaries, major roads, and stream lines; potential losses that include both the 2010 Flood Average Annualized Loss (AAL) Study supplemented with new Hazus runs for areas with new or updated flood modeling; new Flood Risk Project areas; a bar chart summarizing community per capita loss; and graphics and text that promote access and usage of additional data available through the FRD, FIRM, and National Flood Hazard Layer and viewers (desktop or FEMA website, etc.). This information can be used to assist in Flood Risk Project-level planning as well as for developing mitigation actions within each jurisdiction located within the Flood Risk Project.

The FRM provides a graphical overview of the Flood Risk Project which highlights areas of risk that should be noted, based on potential losses, exposed facilities, etc., based on data found in the FRD. Refer to the data in the FRD to conduct additional analyses.

- Flood Risk Project Summary. Within the Flood Risk Project area, summary data for some or all of the following datasets are provided for the entire project area and also on a jurisdiction by jurisdiction basis:
 - Changes Since Last FIRM (CSLF). This is a summary of where the floodplain and flood zones have increased or decreased (only analyzed for areas that were previously mapped using digital FIRMs).
 - Flood Depth and Analysis Grids. A general discussion of the data provided in the FRD.
 - Flood Risk Assessment Information. A loss estimation of potential flood damages using different flood scenarios.
 - Areas of Mitigation Interest. A description of areas that may require mitigation or additional risk analysis.

3.1 Flood Risk Map

The Flood Risk Map for this Flood Risk Project is shown below. In addition to this reduced version of the map, a full size version is available within the FRD.



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3.2 Knox County Flood Risk Project Area Summary

Knox County, Maine is located in the central and southern part of the state and is adjacent to two counties: Waldo County and Lincoln County. The Atlantic Ocean also borders Knox County to the south and east. The county has a total area of 1, 142 square miles. The total land area is 366 square miles. Approximately 705 miles of shoreline in Knox County was studied by detailed coastal analysis to develop flood hazard parameters. The following communities are impacted by the study:

3.2.1 Overview

The information below provides an overview of Knox County as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Andrews Island	230967	0	100	0	100	Υ	1	Υ
Bar Island	230974	0	100	0	100	Υ	1	Υ
Birch Island	230966	0	100	0	100	Υ	1	Υ
Brig Ledge	230947	0	100	0	100	Υ	1	Υ
Camp Cove Ledge	230945	0	100	0	100	Υ	1	Υ
Camp Island	230962	0	100	0	100	Υ	1	Υ
City of Rockland	230076	7,297	100	12.8	100	Υ	1	Υ
Clam Ledges	230970	0	100	0	100	Υ	1	Υ
Cresent Island	230955	0	100	0	100	Υ	1	Υ
Crow Island	230978	0	100	0	100	Υ	1	Υ
Dix Island	230965	0	100	0	100	Υ	1	Υ
East Goose Rock	230990	0	100	0	100	Υ	1	Υ
Egg Rock	230991	0	100	0	100	Υ	1	Υ
Fisherman Island	230953	0	100	0	100	Y	1	Υ
Flag Island	230972	0	100	0	100	Υ	1	Υ
Goose Island	230987	0	100	0	100	Υ	1	Υ
Gooseberry Knob	230959	0	100	0	100	Υ	1	Υ
Graffam Island	230975	0	100	0	100	Υ	1	Υ

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Great Pond Island	230961	0	100	0	100	Υ	1	Υ
Green Ledge	230944	0	100	0	100	Υ	1	Υ
Herring Ledge	230937	0	100	0	100	Υ	1	Υ
Hewett Island	230971	0	100	0	100	Υ	1	Υ
High Island	230964	0	100	0	100	Υ	1	Υ
High Ledge	230946	0	100	0	100	Υ	1	Y
Hog Island	230934	0	100	0	100	Υ	1	Υ
Knox County	12-01- 1051S	39,736	100	366.0	100	N	1	Υ
Large Green Island	230936	0	100	0	100	Υ	1	Υ
Lasell Island	230983	0	100	0	100	Υ	1	Υ
Little Green Island	230935	0	100	0	100	Υ	1	Y
Little Hurricane Island	230973	0	100	0	100	Υ	1	Y
Little Pond Island	230960	0	100	0	100	Υ	1	Υ
Little Two Bush Island	230980	0	100	0	100	Υ	1	Y
Malcolm Ledge	230952	0	100	0	100	Y	1	Υ
Marblehead Island	230954	0	100	0	100	Υ	1	Υ
Mark Island	230988	0	100	0	100	Υ	1	Υ
Matinicus Isle Plantation	230603	51	100	1.6	100	Υ	1	Υ
Metinic Green Island	230932	0	100	0	100	Υ	1	Y
Metinic Island	230931	0	100	0	100	Υ	1	Υ
Mink Island	230976	0	100	0	100	Υ	1	Υ
Mouse Island	230986	0	100	0	100	Υ	1	Υ
Nettle Island	230969	0	100	0	100	Υ	1	Υ

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Oak Island	230957	0	100	0	100	Υ	1	Υ
Otter Island	230956	0	100	0	100	Υ	1	Υ
Pleasant Island	230977	0	100	0	100	Υ	1	Υ
Pudding Island	230941	0	100	0	100	Υ	1	Υ
Ragged Island	230940	0	100	0	100	N	1	Υ
Robinson Rock	230989	0	100	0	100	Υ	1	Υ
Saddle Island	230982	0	100	0	100	Υ	1	Υ
Seal Island	230948	0	100	0	100	N	1	Υ
Shag Ledge	230942	0	100	0	100	Υ	1	Υ
Spectacle Island	230963	0	100	0	100	Υ	1	Υ
Tenpound Island	230633	0	100	0	100	N	1	Υ
The Hogshead	230943	0	100	0	100	Υ	1	Υ
The Nubble	230933	0	100	0	100	Υ	1	Υ
Town of Appleton	230073	1,316	100	32.7	100	Y	1	Υ
Town of Camden	230074	4,850	100	18.2	100	Y	1	Υ
Town of Cushing	230224	1,534	100	19.2	100	Υ	1	Υ
Town of Friendship	230225	1,152	100	14.1	100	Υ	1	Υ
Town of Hope	230226	1,536	100	22.0	100	Υ	1	Y
Town of Isle au Haut	230227	73	100	12.5	100	N	1	Υ
Town of North Haven	230228	355	100	11.6	100	N	1	Υ
Town of Owls Head	230075	1,580	100	8.9	100	Υ	1	Υ
Town of Rockport	230077	3,330	100	21.6	100	Y	1	Υ
Town of Saint George	230229	2,591	100	25.0	100	Υ	1	Y

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of South Thomaston	230078	1,558	100	11.4	100	Υ	1	Y
Town of Thomaston	230079	2,781	100	10.9	100	Υ	1	Y
Town of Union	230080	2,259	100	32.2	100	Υ	1	Υ
Town of Vinalhaven	230230	1,165	100	23.5	100	Υ	1	Y
Town of Warren	230081	4,751	100	46.5	100	Y	1	Y
Town of Washington	230082	1,527	100	38.0	100	Υ	1	Y
Township of Criehaven	231034	01	100	0.7	100	Υ	1	Y
Township of Muscle Ridge	230979	0	100	0	100	Υ	1	Υ
Two Bush Island	230477	0	100	0	100	N	1	Υ
Wheaton Island	230456	0	100	0	100	N	1	Υ
Wheeler Big Rock	230939	0	100	0	100	Υ	1	Y
Wooden Ball Island	230950	0	100	0	100	N	1	Υ
Yellow Ledge	230981	0	100	0	100	N	1	Y

• Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Knox County, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.2.2 Flood Risk Datasets

As a part of this Flood Risk Project, flood risk datasets were created for inclusion in the Flood Risk Database. Those datasets are summarized for this Flood Risk Project below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this county.

The table below summarizes the increases, decreases, and net change of SFHAs for the watershed.

Area of Interest	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)	
Area within SFHA*	N/A	N/A	N/A	N/A	
Area within Floodway*	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Knox County, the figures in this table only represent information within the Knox County.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

The table below summarizes the increases, decreases, and net change of affected structures and population for the watershed.

Area of Study		Buildings		Population				
	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Knox County, the figures in this table only represent information within the Knox County.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

The FRD contains datasets in the form of wave height grids and coastal depth grids for the entire Flood Risk Project that can be used for additional analysis, enhanced visualization, and communication of flood risks for hazard mitigation planning and emergency management. The data provided within the FRD should be used to further isolate areas where flood mitigation potential is high and may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation. Section 2 of the FRR provides general information regarding the development of and potential uses for the data.

• Flood Risk Results Information

The Knox County's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

			Estimated Potential Losses for Flood Event Scenarios									
	Total Inventory		10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$5,967,000,000	70%	\$51,000,000	0%	\$77,900,000	1%	\$86,700,000	1%	\$124,800,000	1%	\$6,500,000	0%
Commercial Building/Contents	\$1,583,200,000	18%	\$14,600,000	0%	\$20,300,000	1%	\$21,200,000	1%	\$28,600,000	1%	\$1,700,000	0%
Other Building/Contents	\$1,021,100,000	12%	\$8,300,000	0%	\$11,500,000	1%	\$12,800,000	1%	\$18,500,000	1%	\$1,000,000	0%
Total Building/Contents ²	\$8,571,300,000	100%	\$73,800,000	0%	\$109,700,000	1%	\$120,700,000	1%	\$171,900,000	1%	\$9,200,000	0%
Business Disruption ³	\$0	N/A	\$200,000	N/A	\$300,000	N/A	\$300,000	N/A	\$500,000	N/A	\$20,000	N/A
TOTAL ⁴	\$8,571,300,000	N/A	\$74,000,000	0%	\$110,000,000	1%	\$121,000,000	1%	\$172,400,000	1%	\$9,300,000	0%

Source: Hazus analysis results stored as the Flood Risk Assessment Dataset in the Flood Risk Database.

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¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

 Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how they are defined for this analysis, and potential mitigation actions that could be considered for each type. The table below summarizes the number of areas of mitigation interest by type.

Type of Mitigation Interest	Number of Areas	Data Source
Dam	1	Town of Appleton, Code Enforcement Officer
Dam	5	US Army Corps of Engineers
NP	25	US Army Corps of Engineers
Other	3	City of Rockland, Code Enforcement Officer
Other Flood Risk Areas	7	Town of Isle au Haut, Consultant to Town
Significant Land Use Change	1	City of Rockland, Code Enforcement Officer
Significant Land Use Change	1	Town of Thomaston
Streamflow Constrictions	7	US Army Corps of Engineers

Areas of Mitigation Interest for Knox County are a vital aspect of a RiskMAP project. They help to identify areas that may be affecting flood risk that would benefit from a raised local awareness. These points of Flood Risk Hazards throughout the county come from a variety of sources including Federal, State, Local, Discovery and Resilience.

- ➤ The Maine Office of Geographic Information Systems provided the location and information regarding Knox County Dams. This dataset provided valuable knowledge about the condition and potential hazards of the structures.
- The United States Army Corps of Engineers provided a detailed hydaulic analysis for all culverts and bridges in the area to obtain estimated flow capacity of these structures. The geodatabase and excel data was used to make assessments on the quality and risk associated with the features for mitigation and planning purposes. Tables and pictures provided insight into how the struture would perform under a series of flood events ranging from the 25-year storm event to the 100-year storm event. A detailed list of the conditions and materials used to construct the bridges and culverts also provided information into their quality and durability.
- Discovery Report Mid-Coastal Watershed from June 2012 provided local community insight into areas of mitigation interest. These are considered highly valuable due to the knowledge from locals that live there on a day to day basis.
- Letters of Map Revision are mitigatins from the community level that gives a detailed analysis of the hydrology in that specific case. These are used to determine risk factors from local claims from specific site surveys.

Numerous culverts were identified as areas of mitigation interests within Knox County. Culverts noted within the Flood Risk Report meet the general criteria for area of mitigation concern. Culverts taken into mitigation consideration are in need of size increase, general repair, and/or unblocking debris.

Also taken into consideration for areas of mitigation concern were dams. Dams found within the Flood Risk Report displayed significant potential downstream hazard according to the United States Army Corps of Engineers.

In addition to the countywide and community based summary and for further information regarding Area of Mitigation Interest and their attributes, refer to the AoMI Point Summary in the Flood Risk Database provided.

3.3 Communities

The following sections provide an overview of the community's floodplain management program as of the date of this publication, as well as summarize the flood risk analysis performed for each project area in Knox County.

3.3.1 Andrews Island Summary (CID 230967)

The following pages include Flood Risk data for the Andrews Island.

3.3.1.1. **Overview**

The information below provides an overview of Andrews Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Andrews Island	230967	0	100	0	100	Y	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Andrews Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.1.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)	
Within SFHA	N/A	N/A	N/A	N/A	
Within Floodway	Vithin Floodway N/A		N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Andrews Island, the figures in this table only represent information within the Andrews Island.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Andrews Island, the figures in this table only represent information within the Andrews Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate
 these and other areas where flood mitigation potential is high. The FRD includes data which may
 be helpful in planning and implementing mitigation strategies. Properties located in areas
 expected to experience some depth of water should seriously consider mitigation options for
 implementation.

Hazus Estimated Loss Information

The Andrews Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios			
	Total In	ventory	10% (10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	
Residential Building/Contents	\$2,000,000	100%	\$200,000	8%	\$400,000	20%	\$400,000	20%	\$600,000	32%	\$30,000	1%	
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Total Building/Contents ²	\$2,000,000	100%	\$200,000	8%	\$400,000	20%	\$400,000	20%	\$600,000	32%	\$30,000	1%	
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	
TOTAL ⁴	\$2,000,000	N/A	\$200,000	8%	\$400,000	20%	\$400,000	20%	\$600,000	32%	\$30,000	1%	

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.2 Town of Appleton Summary (CID 230073)

The following pages include Flood Risk data for the Town of Appleton.

3.3.2.1. **Overview**

The information below provides an overview of the Town of Appleton as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of Appleton	230073	1,316	100	32.7	100	Y	1	Υ

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 1 policies totaling approximately \$280,000

Data provided below only includes areas within the Town of Appleton, that area located within the Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.2.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)	
Within SFHA	N/A	N/A	N/A	N/A	
Within Floodway	Within Floodway N/A		N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Appleton, the figures in this table only represent information within the Town of Appleton.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Appleton, the figures in this table only represent information within the Town of Appleton.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Town of Appleton's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estim	ated Poter	ntial Losses	for Flood	Event Scer	narios			
	Total Inve	entory	10% (10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	
Residential Building/Contents	\$125,200,000	78%	\$1,500,000	1%	\$1,900,000	2%	\$2,100,000	2%	\$2,400,000	2%	\$200,000	0%	
Commercial Building/Contents	\$15,700,000	10%	\$200,000	1%	\$200,000	1%	\$200,000	1%	\$200,000	1%	\$20,000	0%	
Other Building/Contents	\$19,700,000	12%	\$400,000	2%	\$500,000	2%	\$500,000	3%	\$600,000	3%	\$50,000	0%	
Total Building/Contents ²	\$160,600,000	100%	\$2,100,000	1%	\$2,600,000	2%	\$2,800,000	2%	\$3,200,000	2%	\$200,000	0%	
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	0%	
TOTAL ⁴	\$160,600,000	N/A	\$2,100,000	1%	\$2,600,000	2%	\$2,800,000	2%	\$3,200,000	2%	\$200,000	0%	

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

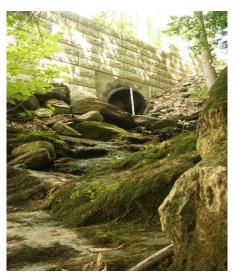
⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

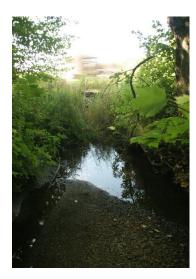
 Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how they are defined for this analysis, and potential mitigation actions that could be considered for each type. The table below summarizes the number of areas of mitigation interest by type.

Type of Mitigation Interest	Number of Areas	Data Source
Dam	1	US Army Corps of Engineers
NP	8	US Army Corps of Engineers
Streamflow Constrictions	2	US Army Corps of Engineers

- o Five culverts were identified by the US Army Corps of Engineers as Areas of Mitigation Interest.
- Two culverts were identified by the US Army Corps of Engineers as Areas of Mitigation Interest due to very steep gradients and banks.



 Two areas were identified by the US Army Corps of Engineers as an Areas of Mitigation Interest due to stream flow constrictions. These areas are located on a tributary to St. George River and on a tributary to Jam Brook.



o A dam was identified by the US Army Corps of Engineers as an Areas of Mitigation Interest due the dam having no Emergency Action Plan. The dam mentioned was Mill Pond Dam.

3.3.3 Bar Island Summary (CID 230974)

The following pages include Flood Risk data for the Bar Island.

3.3.3.1. **Overview**

The information below provides an overview of Bar Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Bar Island	230974	0	100	0	100	Y	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Bar Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.3.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)	
Within SFHA	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Bar Island, the figures in this table only represent information within the Bar Island.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Bar Island, the figures in this table only represent information within the Bar Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Bar Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	Losses for Flood Event Scenarios					
	Total In	ventory	10% (10-yr)	2% (5	60-yr)	1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)		
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.4 Birch Island Summary (CID 230966)

The following pages include Flood Risk data for the Birch Island.

3.3.4.1. **Overview**

The information below provides an overview of Birch Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Birch Island	230966	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Birch Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.4.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Birch Island, the figures in this table only represent information within the Birch Island.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Birch Island, the figures in this table only represent information within the Birch Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Birch Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses for Flood Event Scenarios					
	Total In	ventory	10% (10% (10-yr)		2% (50-yr)		1% (100-yr)		500-yr)	Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.5 Brig Ledge Summary (CID 230947)

The following pages include Flood Risk data for the Brig Ledge.

3.3.5.1. **Overview**

The information below provides an overview of Brig Ledge as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Brig Ledge	230947	0	100	0	100	Υ	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Brig Ledge, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.5.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Brig Ledge, the figures in this table only represent information within the Brig Ledge.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Brig Ledge, the figures in this table only represent information within the Brig Ledge.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - ➤ Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Brig Ledge's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.6 Town of Camden Summary (CID 230074)

The following pages include Flood Risk data for the Town of Camden.

3.3.6.1. **Overview**

The information below provides an overview of the Town of Camden as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of Camden	230074	4,850	100	18.2	100	Υ	1	Υ

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 63 policies totaling approximately \$20,792,200

Data provided below only includes areas within the Town of Camden, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.6.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Camden, the figures in this table only represent information within the Town of Camden.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Camden, the figures in this table only represent information within the Town of Camden.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Town of Camden's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estim	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total Invent	Total Inventory 10% (10-y		10-yr)	.0-yr) 2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$831,600,000	65%	\$6,000,000	1%	\$7,200,000	1%	\$8,400,000	1%	\$10,100,000	1%	\$700,000	0%
Commercial Building/Contents	\$294,500,000	23%	\$8,100,000	3%	\$9,800,000	3%	\$10,300,000	3%	\$11,800,000	4%	\$900,000	0%
Other Building/Contents	\$159,800,000	12%	\$1,400,000	1%	\$1,800,000	1%	\$1,900,000	1%	\$2,200,000	1%	\$200,000	0%
Total Building/Contents ²	\$1,285,900,000	100%	\$15,400,000	1%	\$18,800,000	1%	\$20,700,000	2%	\$24,100,000	2%	\$1,800,000	0%
Business Disruption ³	\$700,000	N/A	\$100,000	N/A	\$200,000	N/A	\$200,000	N/A	\$200,000	N/A	\$10,000	N/A
TOTAL ⁴	\$1,286,600,000	N/A	\$15,600,000	1%	\$19,000,000	1%	\$20,800,000	2%	\$24,300,000	2%	\$1,800,000	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.7 Camp Cove Ledge Summary (CID 230945)

The following pages include Flood Risk data for the Camp Cove Ledge.

3.3.7.1. **Overview**

The information below provides an overview of Camp Cove Ledge as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Camp Cove Ledge	230945	0	100	0	100	Υ	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Camp Cove Ledge, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.7.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)	
Within SFHA	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Camp Cove Ledge, the figures in this table only represent information within the Camp Cove Ledge.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Camp Cove Ledge, the figures in this table only represent information within the Camp Cove Ledge.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Camp Cove Ledge's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios			
	Total In	ventory	10% (10-уr) 2		2% (5	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}									
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.8 Camp Island Summary (CID 230962)

The following pages include Flood Risk data for the Camp Island.

3.3.8.1. **Overview**

The information below provides an overview of Camp Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Camp Island	230962	0	100	0	100	Υ	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Camp Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.8.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)	
Within SFHA	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Camp Island, the figures in this table only represent information within the Camp Island.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Camp Island, the figures in this table only represent information within the Camp Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - ➤ Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Camp Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios			
	Total In	ventory	10% (10-yr)		2% (5	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.9 Clam Ledges Summary (CID 230970)

The following pages include Flood Risk data for the Clam Ledges.

3.3.9.1. **Overview**

The information below provides an overview of Clam Ledges as of the date of this publication.

Community Name	CID	Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Clam Ledges	230970	0	100	0	100	Y	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Clam Ledges, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.9.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	Vithin Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Clam Ledges, the figures in this table only represent information within the Clam Ledges.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Clam Ledges, the figures in this table only represent information within the Clam Ledges.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - ➤ Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Clam Ledges's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

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¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.10 Cresent Island Summary (CID 230955)

The following pages include Flood Risk data for the Cresent Island.

3.3.10.1. **Overview**

The information below provides an overview of Cresent Island as of the date of this publication.

Community Name	CID	Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Cresent Island	Cresent Island 230955	0	100	0	100	Υ	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Cresent Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.10.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	Vithin Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Cresent Island, the figures in this table only represent information within the Cresent Island.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Cresent Island, the figures in this table only represent information within the Cresent Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Cresent Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

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¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.11 Township of Criehaven Summary (CID 231034)

The following pages include Flood Risk data for the Township of Criehaven.

3.3.11.1. **Overview**

The information below provides an overview of the Township of Criehaven as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Township of Criehaven	231034	01	100	0.7	100	Υ	1	Υ

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 1 policies totaling approximately \$350,000

Data provided below only includes areas within the Township of Criehaven, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.11.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

• Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	Within Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Township of Criehaven, the figures in this table only represent information within the Township of Criehaven.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Township of Criehaven, the figures in this table only represent information within the Township of Criehaven.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Township of Criehaven's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$200,000	100%	\$10,000	5%	\$30,000	14%	\$20,000	10%	\$20,000	9%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$200,000	100%	\$10,000	5%	\$30,000	14%	\$20,000	10%	\$20,000	9%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$200,000	N/A	\$10,000	5%	\$30,000	14%	\$20,000	10%	\$20,000	9%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.12 Crow Island Summary (CID 230978)

The following pages include Flood Risk data for the Crow Island.

3.3.12.1. **Overview**

The information below provides an overview of Crow Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Crow Island	230978	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Crow Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.12.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)	
Within SFHA	N/A	N/A	N/A	N/A	
Within Floodway	Within Floodway N/A		N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Crow Island, the figures in this table only represent information within the Crow Island.

Auga of Childre		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Crow Island, the figures in this table only represent information within the Crow Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Crow Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total Inventory		10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.13 Town of Cushing Summary (CID 230224)

The following pages include Flood Risk data for the Town of Cushing.

3.3.13.1. **Overview**

The information below provides an overview of the Town of Cushing as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of Cushing	230224	1,534	100	19.2	100	Υ	1	Y

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 1 policy totaling approximately \$116,000

Data provided below only includes areas within the Town of Cushing, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.13.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

• Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)	
Within SFHA	/ithin SFHA N/A		N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Cushing, the figures in this table only represent information within the Town of Cushing.

Auga of Childre		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Cushing, the figures in this table only represent information within the Town of Cushing.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Town of Cushing's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estim	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total Inve	entory	10% (10% (10-yr)		2% (50-yr)		1% (100-yr)		500-yr)	Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$187,000,000	87%	\$1,100,000	1%	\$2,800,000	1%	\$2,600,000	1%	\$3,800,000	2%	\$200,000	0%
Commercial Building/Contents	\$10,600,000	5%	\$40,000	0%	\$40,000	0%	\$50,000	1%	\$70,000	1%	\$0	0%
Other Building/Contents	\$16,200,000	8%	\$40,000	0%	\$40,000	0%	\$60,000	0%	\$70,000	0%	\$0	0%
Total Building/Contents ²	\$213,800,000	100%	\$1,200,000	1%	\$2,800,000	1%	\$2,700,000	1%	\$3,900,000	2%	\$200,000	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$213,800,000	N/A	\$1,200,000	1%	\$2,800,000	1%	\$2,700,000	1%	\$3,900,000	2%	\$200,000	0%

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¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

 Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how they are defined for this analysis, and potential mitigation actions that could be considered for each type. The table below summarizes the number of areas of mitigation interest by type.

Type of Mitigation Interest	Number of Areas	Data Source
NP	4	US Army Corps of Engineers

 An Area of Mitigation Interest was identified by the US Army Corps of Engineers due to beaver fencing acting as a flash board being clogged with sediment and vegetation within a culvert.



- o Another culvert was identified as possibly perched at low flow.
- o Another culvert was identified as being tidal and having seaweed.
- A final Area of Mitigation Interest was identified as having a breached beaver dam approximately three meters upstream.

3.3.14 Dix Island Summary (CID 230965)

The following pages include Flood Risk data for the Dix Island.

3.3.14.1. **Overview**

The information below provides an overview of Dix Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Dix Island	230965	0	100	0	100	Y	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Dix Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.14.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Dix Island, the figures in this table only represent information within the Dix Island.

Auga of Childre		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Dix Island, the figures in this table only represent information within the Dix Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Dix Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$1,500,000	100%	\$50,000	3%	\$100,000	9%	\$200,000	13%	\$300,000	20%	\$10,000	1%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$1,500,000	100%	\$50,000	3%	\$100,000	9%	\$200,000	13%	\$300,000	20%	\$10,000	1%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$1,500,000	N/A	\$50,000	3%	\$100,000	9%	\$200,000	13%	\$300,000	20%	\$10,000	1%

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¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.15 East Goose Rock Summary (CID 230990)

The following pages include Flood Risk data for the East Goose Rock.

3.3.15.1. **Overview**

The information below provides an overview of East Goose Rock as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
East Goose Rock	230990	0	100	0	100	Υ	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within East Goose Rock, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.15.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of East Goose Rock, the figures in this table only represent information within the East Goose Rock.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of East Goose Rock, the figures in this table only represent information within the East Goose Rock.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The East Goose Rock's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios			
	Total In	ventory	10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)		
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	

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¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.16 Egg Rock Summary (CID 230991)

The following pages include Flood Risk data for the Egg Rock.

3.3.16.1. **Overview**

The information below provides an overview of Egg Rock as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Egg Rock	230991	0	100	0	100	Y	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Egg Rock, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.16.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Egg Rock, the figures in this table only represent information within the Egg Rock.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Egg Rock, the figures in this table only represent information within the Egg Rock.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Egg Rock's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	vent Scenarios			
	Total In	ventory	10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)		
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	

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¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.17 Fisherman Island Summary (CID 230953)

The following pages include Flood Risk data for the Fisherman Island.

3.3.17.1. **Overview**

The information below provides an overview of Fisherman Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Fisherman Island	230953	0	100	0	100	Υ	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Fisherman Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.17.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Fisherman Island, the figures in this table only represent information within the Fisherman Island.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Fisherman Island, the figures in this table only represent information within the Fisherman Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Fisherman Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

			Estimated Potential Losses for Flood Event Scenarios									
	Total Inventory		10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

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¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.18 Flag Island Summary (CID 230972)

The following pages include Flood Risk data for the Flag Island.

3.3.18.1. **Overview**

The information below provides an overview of Flag Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Population Community in Land Area		NFIP	CRS Rating	Mitigation Plan
Flag Island	Flag Island 230972		100	0	100	Υ	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Flag Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.18.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	Within Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Flag Island, the figures in this table only represent information within the Flag Island.

		Buildings		Population				
Area of Study	Increase	ncrease Decrease		Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Flag Island, the figures in this table only represent information within the Flag Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Flag Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	ent Scenarios				
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)			
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}										
Residential Building/Contents	\$200,000	100%	\$50,000	29%	\$70,000	36%	\$70,000	36%	\$100,000	64%	\$10,000	3%		
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%		
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%		
Total Building/Contents ²	\$200,000	100%	\$50,000	29%	\$70,000	36%	\$70,000	36%	\$100,000	64%	\$10,000	3%		
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A		
TOTAL ⁴	\$200,000	N/A	\$50,000	29%	\$70,000	36%	\$70,000	36%	\$100,000	64%	\$10,000	3%		

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.19 Town of Friendship Summary (CID 230225)

The following pages include Flood Risk data for the Town of Friendship.

3.3.19.1. **Overview**

The information below provides an overview of the Town of Friendship as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of Friendship	230225	1,152	100	14.1	100	Υ	1	Y

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 10 policies totaling approximately \$2,387,000

Data provided below only includes areas within the Town of Friendship, that area located within the Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.19.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	Within SFHA N/A		N/A	N/A
Within Floodway	Within Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Friendship, the figures in this table only represent information within the Town of Friendship.

		Buildings		Population				
Area of Study	Increase	ncrease Decrease		Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Friendship, the figures in this table only represent information within the Town of Friendship.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Town of Friendship's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estim	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total Inve	entory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$226,600,000	85%	\$5,100,000	2%	\$6,300,000	3%	\$5,200,000	2%	\$10,500,000	5%	\$600,000	0%
Commercial Building/Contents	\$16,900,000	6%	\$200,000	1%	\$300,000	2%	\$400,000	2%	\$500,000	3%	\$20,000	0%
Other Building/Contents	\$24,300,000	9%	\$90,000	0%	\$90,000	0%	\$200,000	1%	\$200,000	1%	\$10,000	0%
Total Building/Contents ²	\$267,800,000	100%	\$5,400,000	2%	\$6,700,000	3%	\$5,800,000	2%	\$11,200,000	4%	\$600,000	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$10,000	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$267,800,000	N/A	\$5,400,000	2%	\$6,700,000	3%	\$5,800,000	2%	\$11,200,000	4%	\$600,000	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.20 Goose Island Summary (CID 230987)

The following pages include Flood Risk data for the Goose Island.

3.3.20.1. **Overview**

The information below provides an overview of Goose Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Goose Island	230987	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Goose Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.20.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Goose Island, the figures in this table only represent information within the Goose Island.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Goose Island, the figures in this table only represent information within the Goose Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Goose Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.21 Gooseberry Knob Summary (CID 230959)

The following pages include Flood Risk data for the Gooseberry Knob.

3.3.21.1. **Overview**

The information below provides an overview of Gooseberry Knob as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Gooseberry Knob	230959	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Gooseberry Knob, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.21.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Gooseberry Knob, the figures in this table only represent information within the Gooseberry Knob.

		Buildings		Population				
Area of Study	Increase Decrease		Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Gooseberry Knob, the figures in this table only represent information within the Gooseberry Knob.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Gooseberry Knob's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.22 Graffam Island Summary (CID 230975)

The following pages include Flood Risk data for the Graffam Island.

3.3.22.1. **Overview**

The information below provides an overview of Graffam Island as of the date of this publication.

Community Name	Total CID Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan	
Graffam Island 2309	230975	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Graffam Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.22.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Graffam Island, the figures in this table only represent information within the Graffam Island.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Graffam Island, the figures in this table only represent information within the Graffam Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Graffam Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$400,000	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$400,000	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$400,000	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.23 Great Pond Island Summary (CID 230961)

The following pages include Flood Risk data for the Great Pond Island.

3.3.23.1. **Overview**

The information below provides an overview of Great Pond Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Great Pond Island	230961	0	100	0	100	Υ	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Great Pond Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.23.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Great Pond Island, the figures in this table only represent information within the Great Pond Island.

		Buildings		Population				
Area of Study	Increase Decrease		Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Great Pond Island, the figures in this table only represent information within the Great Pond Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Great Pond Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (5	2% (50-yr)		1% (100-yr)		500-yr)	Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$400,000	100%	\$10,000	2%	\$40,000	10%	\$30,000	7%	\$40,000	10%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$400,000	100%	\$10,000	2%	\$40,000	10%	\$30,000	7%	\$40,000	10%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$400,000	N/A	\$10,000	2%	\$40,000	10%	\$30,000	7%	\$40,000	10%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.24 Green Ledge Summary (CID 230944)

The following pages include Flood Risk data for the Green Ledge.

3.3.24.1. **Overview**

The information below provides an overview of Green Ledge as of the date of this publication.

Community Name	CID	Total CID Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Green Ledge	230944	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Green Ledge, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.24.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Green Ledge, the figures in this table only represent information within the Green Ledge.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Green Ledge, the figures in this table only represent information within the Green Ledge.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Green Ledge's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.25 Herring Ledge Summary (CID 230937)

The following pages include Flood Risk data for the Herring Ledge.

3.3.25.1. **Overview**

The information below provides an overview of Herring Ledge as of the date of this publication.

Community Name	CID	Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Herring Ledge	230937	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Herring Ledge, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.25.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	Within Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Herring Ledge, the figures in this table only represent information within the Herring Ledge.

		Buildings		Population				
Area of Study	Increase Decrease		Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Herring Ledge, the figures in this table only represent information within the Herring Ledge.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Herring Ledge's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.26 Hewett Island Summary (CID 230971)

The following pages include Flood Risk data for the Hewett Island.

3.3.26.1. **Overview**

The information below provides an overview of Hewett Island as of the date of this publication.

Community Name	CID	Community Population	Percent of Population in Watershed	opulation Community in Land Area		NFIP	CRS Rating	Mitigation Plan
Hewett Island	230971	0	100	0	100	Y	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Hewett Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.26.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Hewett Island, the figures in this table only represent information within the Hewett Island.

		Buildings		Population				
Area of Study	Increase Decrease		Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Hewett Island, the figures in this table only represent information within the Hewett Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Hewett Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (5	60-yr)	1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$2,800,000	100%	\$200,000	7%	\$500,000	17%	\$500,000	17%	\$800,000	28%	\$30,000	1%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$2,800,000	100%	\$200,000	7%	\$500,000	17%	\$500,000	17%	\$800,000	28%	\$30,000	1%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$2,800,000	N/A	\$200,000	7%	\$500,000	17%	\$500,000	17%	\$800,000	28%	\$30,000	1%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.27 High Island Summary (CID 230964)

The following pages include Flood Risk data for the High Island.

3.3.27.1. **Overview**

The information below provides an overview of High Island as of the date of this publication.

Community Name	CID	Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
High Island	230964	0	100	0	100	Υ	1	Y

• Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within High Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.27.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	Within Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of High Island, the figures in this table only represent information within the High Island.

		Buildings		Population				
Area of Study	Increase	Increase Decrease		Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of High Island, the figures in this table only represent information within the High Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The High Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$200,000	100%	\$10,000	5%	\$10,000	5%	\$20,000	10%	\$10,000	5%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$200,000	100%	\$10,000	5%	\$10,000	5%	\$20,000	10%	\$10,000	5%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$200,000	N/A	\$10,000	5%	\$10,000	5%	\$20,000	10%	\$10,000	5%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.28 High Ledge Summary (CID 230946)

The following pages include Flood Risk data for the High Ledge.

3.3.28.1. **Overview**

The information below provides an overview of High Ledge as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
High Ledge	High Ledge 230946		100	0	100	Y	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within High Ledge, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.28.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	Within Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of High Ledge, the figures in this table only represent information within the High Ledge.

		Buildings		Population				
Area of Study	Increase Decrease		Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of High Ledge, the figures in this table only represent information within the High Ledge.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The High Ledge's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (5	2% (50-yr)		1% (100-yr)		500-yr)	Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.29 Hog Island Summary (CID 230934)

The following pages include Flood Risk data for the Hog Island.

3.3.29.1. **Overview**

The information below provides an overview of Hog Island as of the date of this publication.

Community Name	CID	Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Hog Island	230934	0	100	0	100	Υ	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Hog Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.29.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

- Changes Since Last FIRM
- Changes Since Last FIRM
 - Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Hog Island, the figures in this table only represent information within the Hog Island.

		Buildings		Population				
Area of Study	Increase	Increase Decrease		Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Hog Island, the figures in this table only represent information within the Hog Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Hog Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (5	2% (50-yr)		1% (100-yr)		500-yr)	Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.30 Town of Hope Summary (CID 230226)

The following pages include Flood Risk data for the Town of Hope.

3.3.30.1. **Overview**

The information below provides an overview of the Town of Hope as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of Hope	230226	1,536	100	22.0	100	Υ	1	Y

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 3 policies totaling approximately \$310,000

Data provided below only includes areas within the Town of Hope, that area located within the Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.30.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

• Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Hope, the figures in this table only represent information within the Town of Hope.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Hope, the figures in this table only represent information within the Town of Hope.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Town of Hope's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estim	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total Inver	ntory	10% (10% (10-yr)		2% (50-yr) 1% (100-yr)		00-yr)	0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$251,300,000	84%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$26,200,000	9%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$22,400,000	7%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$300,000,000	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL⁴	\$300,000,000	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Type of Mitigation Interest	Number of Areas	Data Source
Dam	1	US Army Corps of Engineers
Streamflow Constrictions	1	US Army Corps of Engineers

- Fish Pond Dam was determined an Area of Mitigation Interest by the US Army Corps of Engineers due to the lack of an Emergency Action Plan.
- o A culvert was identified as an Area of Mitigation Interest due to hay being dumped at the outlet.



3.3.31 Town of Isle au Haut Summary (CID 230227)

The following pages include Flood Risk data for the Town of Isle au Haut.

3.3.31.1. **Overview**

The information below provides an overview of the Town of Isle au Haut as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of Isle au Haut	230227	73	100	12.5	100	N	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within the Town of Isle au Haut, that area located within the Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.31.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²) Increase (mi²) De		Decrease (mi²)	Net Change (mi²)	
Within SFHA	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Isle au Haut, the figures in this table only represent information within the Town of Isle au Haut.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Isle au Haut, the figures in this table only represent information within the Town of Isle au Haut.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate
 these and other areas where flood mitigation potential is high. The FRD includes data which may
 be helpful in planning and implementing mitigation strategies. Properties located in areas
 expected to experience some depth of water should seriously consider mitigation options for
 implementation.

Hazus Estimated Loss Information

The Town of Isle au Haut's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10% (10-yr)		2% (50-yr) 1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)		
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$39,100,000	95%	\$900,000	2%	\$1,100,000	3%	\$1,400,000	4%	\$2,000,000	5%	\$100,000	0%
Commercial Building/Contents	\$1,100,000	3%	\$0	0%	\$10,000	1%	\$10,000	1%	\$10,000	1%	\$0	0%
Other Building/Contents	\$800,000	2%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$41,100,000	100%	\$900,000	2%	\$1,100,000	3%	\$1,400,000	4%	\$2,100,000	5%	\$100,000	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$41,100,000	N/A	\$900,000	2%	\$1,100,000	3%	\$1,400,000	4%	\$2,100,000	5%	\$100,000	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

 Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how they are defined for this analysis, and potential mitigation actions that could be considered for each type. The table below summarizes the number of areas of mitigation interest by type.

Type of Mitigation Interest	Number of Areas	Data Source
Other Flood Risk Areas	7	Town of Isle au Haut, Consultant to Town

o Seven areas where identified as Areas of Mitigation Interest due to occasional flooding.

3.3.32 Large Green Island Summary (CID 230936)

The following pages include Flood Risk data for the Large Green Island.

3.3.32.1. **Overview**

The information below provides an overview of Large Green Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Large Green Island	230936	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Large Green Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.32.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)	
Within SFHA	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Large Green Island, the figures in this table only represent information within the Large Green Island.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Large Green Island, the figures in this table only represent information within the Large Green Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Large Green Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (5	60-yr)	1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$1,100,000	100%	\$20,000	2%	\$100,000	10%	\$70,000	6%	\$100,000	9%	\$10,000	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$1,100,000	100%	\$20,000	2%	\$100,000	10%	\$70,000	6%	\$100,000	9%	\$10,000	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$1,100,000	N/A	\$20,000	2%	\$100,000	10%	\$70,000	6%	\$100,000	9%	\$10,000	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.33 Lasell Island Summary (CID 230983)

The following pages include Flood Risk data for the Lasell Island.

3.3.33.1. **Overview**

The information below provides an overview of Lasell Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Lasell Island	230983	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Lasell Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.33.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Lasell Island, the figures in this table only represent information within the Lasell Island.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Lasell Island, the figures in this table only represent information within the Lasell Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - ➤ Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Lasell Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (5	60-yr)	1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$1,000,000	100%	\$30,000	3%	\$70,000	7%	\$50,000	5%	\$80,000	8%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$1,000,000	100%	\$30,000	3%	\$70,000	7%	\$50,000	5%	\$80,000	8%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$1,000,000	N/A	\$30,000	3%	\$70,000	7%	\$50,000	5%	\$80,000	8%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.34 Little Green Island Summary (CID 230935)

The following pages include Flood Risk data for the Little Green Island.

3.3.34.1. **Overview**

The information below provides an overview of Little Green Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Little Green Island	230935	0	100	0	100	Y	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Little Green Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.34.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Little Green Island, the figures in this table only represent information within the Little Green Island.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Little Green Island, the figures in this table only represent information within the Little Green Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Little Green Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (5	60-yr)	1% (1	00-yr)	0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$200,000	100%	\$10,000	5%	\$20,000	10%	\$20,000	10%	\$30,000	15%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$200,000	100%	\$10,000	5%	\$20,000	10%	\$20,000	10%	\$30,000	15%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$200,000	N/A	\$10,000	5%	\$20,000	10%	\$20,000	10%	\$30,000	15%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.35 Little Hurricane Island Summary (CID 230973)

The following pages include Flood Risk data for the Little Hurricane Island.

3.3.35.1. **Overview**

The information below provides an overview of Little Hurricane Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Little Hurricane Island	230973	0	100	0	100	Υ	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Little Hurricane Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.35.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

- Changes Since Last FIRM
- Changes Since Last FIRM
 - o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Little Hurricane Island, the figures in this table only represent information within the Little Hurricane Island.

Area of Study		Buildings		Population				
	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Little Hurricane Island, the figures in this table only represent information within the Little Hurricane Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Little Hurricane Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

			Estimated Potential Losses for Flood Event Scenarios									
	Total Inventory		10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.36 Little Pond Island Summary (CID 230960)

The following pages include Flood Risk data for the Little Pond Island.

3.3.36.1. **Overview**

The information below provides an overview of Little Pond Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Little Pond Island	230960	0	100	0	100	Y	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Little Pond Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.36.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Little Pond Island, the figures in this table only represent information within the Little Pond Island.

		Buildings		Population				
Area of Study	Increase Decrease		Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Little Pond Island, the figures in this table only represent information within the Little Pond Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Little Pond Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.37 Little Two Bush Island Summary (CID 230980)

The following pages include Flood Risk data for the Little Two Bush Island.

3.3.37.1. **Overview**

The information below provides an overview of Little Two Bush Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Little Two Bush Island	230980	0	100	0	100	Y	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Little Two Bush Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.37.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

Changes Since Last FIRM

Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Little Two Bush Island, the figures in this table only represent information within the Little Two Bush Island.

		Buildings		Population				
Area of Study	Increase Decrease		Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Little Two Bush Island, the figures in this table only represent information within the Little Two Bush Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Little Two Bush Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (5	2% (50-yr)		1% (100-yr)		500-yr)	Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.38 Malcolm Ledge Summary (CID 230952)

The following pages include Flood Risk data for the Malcolm Ledge.

3.3.38.1. **Overview**

The information below provides an overview of Malcolm Ledge as of the date of this publication.

Community Name	CID	CID Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Malcolm Ledge	230952	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Malcolm Ledge, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.38.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Malcolm Ledge, the figures in this table only represent information within the Malcolm Ledge.

		Buildings		Population				
Area of Study	Increase Decrease		Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Malcolm Ledge, the figures in this table only represent information within the Malcolm Ledge.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - ➤ Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Malcolm Ledge's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.39 Marblehead Island Summary (CID 230954)

The following pages include Flood Risk data for the Marblehead Island.

3.3.39.1. **Overview**

The information below provides an overview of Marblehead Island as of the date of this publication.

Community Name	CID	Total P Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Marblehead Island	230954	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Marblehead Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.39.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	Within Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Marblehead Island, the figures in this table only represent information within the Marblehead Island.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Marblehead Island, the figures in this table only represent information within the Marblehead Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Marblehead Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.40 Mark Island Summary (CID 230988)

The following pages include Flood Risk data for the Mark Island.

3.3.40.1. **Overview**

The information below provides an overview of Mark Island as of the date of this publication.

Community Name	CID	Total CID Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Mark Island	230988	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Mark Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.40.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Mark Island, the figures in this table only represent information within the Mark Island.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Mark Island, the figures in this table only represent information within the Mark Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - ➤ Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Mark Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.41 Matinicus Isle Plantation Summary (CID 230603)

The following pages include Flood Risk data for the Matinicus Isle Plantation.

3.3.41.1. **Overview**

The information below provides an overview of Matinicus Isle Plantation as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Matinicus Isle Plantation	230603	51	100	1.6	100	Υ	1	Y

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 1 policy totaling approximately \$250,000

Data provided below only includes areas within Matinicus Isle Plantation, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.41.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

• Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	Within SFHA N/A		N/A	N/A
Within Floodway	Within Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Matinicus Isle Plantation, the figures in this table only represent information within the Matinicus Isle Plantation.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Matinicus Isle Plantation, the figures in this table only represent information within the Matinicus Isle Plantation.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Matinicus Isle Plantation's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)	Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$27,800,000	88%	\$600,000	2%	\$1,300,000	5%	\$1,100,000	4%	\$1,500,000	5%	\$90,000	0%
Commercial Building/Contents	\$2,100,000	7%	\$10,000	1%	\$10,000	0%	\$20,000	1%	\$40,000	2%	\$0	0%
Other Building/Contents	\$1,600,000	5%	\$10,000	1%	\$10,000	0%	\$10,000	1%	\$30,000	2%	\$0	0%
Total Building/Contents ²	\$31,400,000	100%	\$700,000	2%	\$1,300,000	5%	\$1,100,000	4%	\$1,500,000	5%	\$90,000	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$31,400,000	N/A	\$700,000	2%	\$1,300,000	5%	\$1,100,000	4%	\$1,500,000	5%	\$90,000	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.42 Metinic Green Island Summary (CID 230932)

The following pages include Flood Risk data for the Metinic Green Island.

3.3.42.1. **Overview**

The information below provides an overview of Metinic Green Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Metinic Green Island	230932	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Metinic Green Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.42.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Metinic Green Island, the figures in this table only represent information within the Metinic Green Island.

		Buildings		Population				
Area of Study	Increase	Increase Decrease		Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Metinic Green Island, the figures in this table only represent information within the Metinic Green Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Metinic Green Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.43 Metinic Island Summary (CID 230931)

The following pages include Flood Risk data for the Metinic Island.

3.3.43.1. **Overview**

The information below provides an overview of Metinic Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Metinic Island	230931	0	100	0	100	Y	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Metinic Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.43.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Metinic Island, the figures in this table only represent information within the Metinic Island.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Metinic Island, the figures in this table only represent information within the Metinic Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Metinic Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$1,600,000	100%	\$70,000	4%	\$200,000	13%	\$100,000	9%	\$300,000	15%	\$10,000	1%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$1,600,000	100%	\$70,000	4%	\$200,000	13%	\$100,000	9%	\$300,000	15%	\$10,000	1%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$1,600,000	N/A	\$70,000	4%	\$200,000	13%	\$100,000	9%	\$300,000	15%	\$10,000	1%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.44 Mink Island Summary (CID 230976)

The following pages include Flood Risk data for the Mink Island.

3.3.44.1. **Overview**

The information below provides an overview of Mink Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Mink Island	230976	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Mink Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.44.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

- Changes Since Last FIRM
- Changes Since Last FIRM
 - o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Mink Island, the figures in this table only represent information within the Mink Island.

		Buildings		Population				
Area of Study	Increase	Increase Decrease		Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Mink Island, the figures in this table only represent information within the Mink Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Mink Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$400,000	100%	\$0	0%	\$30,000	8%	\$0	0%	\$30,000	8%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$400,000	100%	\$0	0%	\$30,000	8%	\$0	0%	\$30,000	8%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$400,000	N/A	\$0	0%	\$30,000	8%	\$0	0%	\$30,000	8%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.45 Mouse Island Summary (CID 230986)

The following pages include Flood Risk data for the Mouse Island.

3.3.45.1. **Overview**

The information below provides an overview of Mouse Island as of the date of this publication.

Community Name	CID	Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Mouse Island	230986	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Mouse Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.45.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Mouse Island, the figures in this table only represent information within the Mouse Island.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Mouse Island, the figures in this table only represent information within the Mouse Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Mouse Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10% (10-yr)		2% (50-yr)		1% (100-yr)		500-yr)	Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.46 Township of Muscle Ridge Summary (CID 230979)

The following pages include Flood Risk data for the Township of Muscle Ridge.

3.3.46.1. **Overview**

The information below provides an overview of the Township of Muscle Ridge as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Township of Muscle Ridge	230979	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within the Township of Muscle Ridge, that area located within the Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.46.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

- Changes Since Last FIRM
- Changes Since Last FIRM
 - o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	/ithin SFHA N/A		N/A	N/A
Within Floodway	Within Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Township of Muscle Ridge, the figures in this table only represent information within the Township of Muscle Ridge.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Township of Muscle Ridge, the figures in this table only represent information within the Township of Muscle Ridge.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Township of Muscle Ridge's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$200,000	100%	\$30,000	15%	\$30,000	15%	\$70,000	35%	\$60,000	30%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$200,000	100%	\$30,000	15%	\$30,000	15%	\$70,000	35%	\$60,000	30%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$200,000	N/A	\$30,000	15%	\$30,000	15%	\$70,000	35%	\$60,000	30%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.47 Nettle Island Summary (CID 230969)

The following pages include Flood Risk data for the Nettle Island.

3.3.47.1. **Overview**

The information below provides an overview of Nettle Island as of the date of this publication.

Community Name	CID	CID Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Nettle Island	230969	0	100	0	100	Υ	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Nettle Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.47.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	thin SFHA N/A		N/A	N/A
Within Floodway	Within Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Nettle Island, the figures in this table only represent information within the Nettle Island.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Nettle Island, the figures in this table only represent information within the Nettle Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Nettle Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10% (10-yr)		2% (50-yr)		1% (100-yr)		500-yr)	Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.48 Town of North Haven Summary (CID 230228)

The following pages include Flood Risk data for the Town of North Haven.

3.3.48.1. **Overview**

The information below provides an overview of the Town of North Haven as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Population Community in Land Area		NFIP	CRS Rating	Mitigation Plan
Town of North Haven	230228	355	100	11.6	100	N	1	Υ

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 8 policies totaling approximately \$2,205,900

Data provided below only includes areas within the Town of North Haven, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.48.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

• Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	Vithin SFHA N/A		N/A	N/A
Within Floodway	Within Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of North Haven, the figures in this table only represent information within the Town of North Haven.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of North Haven, the figures in this table only represent information within the Town of North Haven.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Town of North Haven's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estim	ated Poter	ntial Losses	for Flood	Event Scer	narios			
	Total Inve	entory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)		
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	
Residential Building/Contents	\$168,400,000	88%	\$0	0%	\$0	0%	\$0	0%	\$6,000,000	4%	\$0	0%	
Commercial Building/Contents	\$11,800,000	6%	\$0	0%	\$0	0%	\$0	0%	\$100,000	1%	\$0	0%	
Other Building/Contents	\$11,400,000	6%	\$0	0%	\$0	0%	\$0	0%	\$200,000	2%	\$0	0%	
Total Building/Contents ²	\$191,600,000	100%	\$0	0%	\$0	0%	\$0	0%	\$6,400,000	3%	\$0	0%	
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	
TOTAL ⁴	\$191,600,000	N/A	\$0	0%	\$0	0%	\$0	0%	\$6,400,000	3%	\$0	0%	

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.49 Oak Island Summary (CID 230957)

The following pages include Flood Risk data for the Oak Island.

3.3.49.1. **Overview**

The information below provides an overview of Oak Island as of the date of this publication.

Community Name	CID	Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Oak Island	230957	0	100	0	100	Y	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Oak Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.49.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	Within Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Oak Island, the figures in this table only represent information within the Oak Island.

		Buildings		Population				
Area of Study	Increase Decrease		Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Oak Island, the figures in this table only represent information within the Oak Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Oak Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.50 Otter Island Summary (CID 230956)

The following pages include Flood Risk data for the Otter Island.

3.3.50.1. **Overview**

The information below provides an overview of Otter Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Otter Island	Otter Island 230956	0	100	0	100	Υ	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Otter Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.50.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	Within Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Otter Island, the figures in this table only represent information within the Otter Island.

		Buildings		Population				
Area of Study	Increase Decrease		Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Otter Island, the figures in this table only represent information within the Otter Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate
 these and other areas where flood mitigation potential is high. The FRD includes data which may
 be helpful in planning and implementing mitigation strategies. Properties located in areas
 expected to experience some depth of water should seriously consider mitigation options for
 implementation.

Hazus Estimated Loss Information

The Otter Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$400,000	100%	\$10,000	2%	\$30,000	8%	\$20,000	7%	\$30,000	8%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$400,000	100%	\$10,000	2%	\$30,000	8%	\$20,000	7%	\$30,000	8%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$400,000	N/A	\$10,000	2%	\$30,000	8%	\$20,000	7%	\$30,000	8%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.51 Town of Owls Head Summary (CID 230075)

The following pages include Flood Risk data for the Town of Owls Head.

3.3.51.1. **Overview**

The information below provides an overview of the Town of Owls Head as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of Owls Head	230075	1,580	100	8.9	100	Υ	1	Y

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 31 policies totaling approximately \$8,107,100

Data provided below only includes areas within the Town of Owls Head, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.51.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

• Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	Within SFHA N/A		N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Owls Head, the figures in this table only represent information within the Town of Owls Head.

		Buildings		Population				
Area of Study	Increase Decrease		Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Owls Head, the figures in this table only represent information within the Town of Owls Head.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Town of Owls Head's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estim	ated Poter	ntial Losses	for Flood	Event Scer	narios				
	Total Inve	entory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)			
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}		
Residential Building/Contents	\$265,300,000	73%	\$3,000,000	1%	\$5,900,000	2%	\$5,800,000	2%	\$9,600,000	4%	\$400,000	0%		
Commercial Building/Contents	\$75,000,000	21%	\$30,000	0%	\$200,000	0%	\$100,000	0%	\$400,000	1%	\$10,000	0%		
Other Building/Contents	\$21,300,000	6%	\$10,000	0%	\$60,000	0%	\$60,000	0%	\$100,000	1%	\$0	0%		
Total Building/Contents ²	\$361,600,000	100%	\$3,000,000	1%	\$6,100,000	2%	\$6,000,000	2%	\$10,100,000	3%	\$400,000	0%		
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A		
TOTAL ⁴	\$361,600,000	N/A	\$3,000,000	1%	\$6,100,000	2%	\$6,000,000	2%	\$10,100,000	3%	\$400,000	0%		

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.52 Pleasant Island Summary (CID 230977)

The following pages include Flood Risk data for the Pleasant Island.

3.3.52.1. **Overview**

The information below provides an overview of Pleasant Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Population Community in Land Area		NFIP	CRS Rating	Mitigation Plan
Pleasant Island	230977	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Pleasant Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.52.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Pleasant Island, the figures in this table only represent information within the Pleasant Island.

		Buildings		Population				
Area of Study	Increase Decrease		Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Pleasant Island, the figures in this table only represent information within the Pleasant Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Pleasant Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		ed (\$/yr)
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$2,000,000	100%	\$200,000	10%	\$300,000	15%	\$0	0%	\$0	0%	\$20,000	1%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$2,000,000	100%	\$200,000	10%	\$300,000	15%	\$0	0%	\$0	0%	\$20,000	1%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$2,000,000	N/A	\$200,000	10%	\$300,000	15%	\$0	N/A	\$0	0%	\$20,000	1%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.53 Pudding Island Summary (CID 230941)

The following pages include Flood Risk data for the Pudding Island.

3.3.53.1. **Overview**

The information below provides an overview of Pudding Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Pudding Island	230941	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Pudding Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.53.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Pudding Island, the figures in this table only represent information within the Pudding Island.

		Buildings		Population				
Area of Study	Increase Decrease		Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Pudding Island, the figures in this table only represent information within the Pudding Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Pudding Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.54 Ragged Island Summary (CID 230940)

The following pages include Flood Risk data for the Ragged Island.

3.3.54.1. **Overview**

The information below provides an overview of Ragged Island as of the date of this publication.

Community Name	CID	Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Ragged Island	230940	0	100	0	100	N	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Ragged Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.54.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Ragged Island, the figures in this table only represent information within the Ragged Island.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Ragged Island, the figures in this table only represent information within the Ragged Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Ragged Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$6,400,000	100%	\$0	0%	\$400,000	7%	\$500,000	9%	\$800,000	12%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$6,400,000	100%	\$0	0%	\$400,000	7%	\$500,000	9%	\$800,000	12%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$6,400,000	N/A	\$0	0%	\$400,000	7%	\$500,000	9%	\$800,000	12%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.55 Robinson Rock Summary (CID 230989)

The following pages include Flood Risk data for the Robinson Rock.

3.3.55.1. **Overview**

The information below provides an overview of the Robinson Rock as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Robinson Rock	Robinson Rock 230989		100	0	100	Y	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within the Robinson Rock, that area located within the Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.55.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Robinson Rock, the figures in this table only represent information within the Robinson Rock.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Robinson Rock, the figures in this table only represent information within the Robinson Rock.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Robinson Rock's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (5	2% (50-yr)		1% (100-yr)		500-yr)	Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.56 City of Rockland Summary (CID 230076)

The following pages include Flood Risk data for the City of Rockland.

3.3.56.1. **Overview**

The information below provides an overview of the City of Rockland as of the date of this publication.

Community Name	CID	Total I Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
City of Rockland	230076	7,297	100	12.8	100	Y	1	Υ

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 15 policies totaling approximately \$3,253,400

Data provided below only includes areas within the City of Rockland, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.56.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

• Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	Within Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of City of Rockland, the figures in this table only represent information within the City of Rockland.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of City of Rockland, the figures in this table only represent information within the City of Rockland.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate
 these and other areas where flood mitigation potential is high. The FRD includes data which may
 be helpful in planning and implementing mitigation strategies. Properties located in areas
 expected to experience some depth of water should seriously consider mitigation options for
 implementation.

Hazus Estimated Loss Information

The City of Rockland's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estim	ated Poter	ntial Losses	for Flood	Event Scer	narios				
	Total Inver	ntory	10% (10-yr)	2% (5	2% (50-yr)		1% (100-yr)		500-yr)	Annualized (\$/yr)			
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}		
Residential Building/Contents	\$830,800,000	50%	\$1,900,000	0%	\$3,000,000	0%	\$3,400,000	0%	\$5,700,000	1%	\$200,000	0%		
Commercial Building/Contents	\$500,000,000	30%	\$2,000,000	0%	\$3,500,000	1%	\$3,800,000	1%	\$6,700,000	1%	\$300,000	0%		
Other Building/Contents	\$315,400,000	20%	\$2,700,000	1%	\$4,200,000	1%	\$4,600,000	1%	\$8,100,000	3%	\$400,000	0%		
Total Building/Contents ²	\$1,646,200,000	100%	\$6,600,000	0%	\$10,700,000	1%	\$11,800,000	1%	\$20,400,000	1%	\$900,000	0%		
Business Disruption ³	\$0	N/A	\$20,000	N/A	\$40,000	N/A	\$50,000	N/A	\$100,000	N/A	\$0	N/A		
TOTAL ⁴	\$1,646,200,000	N/A	\$6,600,000	0%	\$10,800,000	1%	\$11,900,000	1%	\$20,600,000	1%	\$900,000	0%		

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Type of Mitigation Interest	Number of Areas	Data Source
Other	3	City of Rockland, Code Enforcement Officer
Significant Land Use Change	1	City of Rockland, Code Enforcement Officer

- Areas of Mitigation Interest include two culverts that have been enlarged by the Maine Department of Transportation in 2001 and 2008.
- o Another culvert was replaced and enlarged by the City of Rockland in 2011.
- A cove was filled in many years ago. The Rockland sewage treatment plant was constructed on this filled in cove.



3.3.57 Town of Rockport Summary (CID 230077)

The following pages include Flood Risk data for the Town of Rockport.

3.3.57.1. **Overview**

The information below provides an overview of the Town of Rockport as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of Rockport	230077	3,330	100	21.6	100	Y	1	Υ

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 12 policies totaling approximately \$3,581,000

Data provided below only includes areas within the Town of Rockport, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.57.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

• Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Rockport, the figures in this table only represent information within the Town of Rockport.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Rockport, the figures in this table only represent information within the Town of Rockport.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Town of Rockport's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estim	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total Inve	ntory	10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$755,200,000	66%	\$900,000	0%	\$3,300,000	0%	\$1,700,000	0%	\$2,400,000	0%	\$100,000	0%
Commercial Building/Contents	\$270,800,000	24%	\$100,000	0%	\$1,000,000	0%	\$400,000	0%	\$500,000	0%	\$30,000	0%
Other Building/Contents	\$118,300,000	10%	\$30,000	0%	\$70,000	0%	\$70,000	0%	\$100,000	0%	\$0	0%
Total Building/Contents ²	\$1,144,300,000	100%	\$1,000,000	0%	\$4,400,000	0%	\$2,200,000	0%	\$3,000,000	0%	\$200,000	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$10,000	N/A	\$0	N/A
TOTAL ⁴	\$1,144,300,000	N/A	\$1,000,000	0%	\$4,400,000	0%	\$2,200,000	0%	\$3,100,000	0%	\$200,000	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

Type of Mitigation Interest	Number of Areas	Data Source		
Dam	1	US Army Corps of Engineers		

o Tolman Dam was determined an Area of Mitigation Interest by the US Army Corps of Engineers due to a lack of an Emergency Action Plan.

3.3.58 Saddle Island Summary (CID 230982)

The following pages include Flood Risk data for the Saddle Island.

3.3.58.1. **Overview**

The information below provides an overview of Saddle Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Saddle Island	230982	0	100	0	100	Υ	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Saddle Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.58.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)	
Within SFHA	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Saddle Island, the figures in this table only represent information within the Saddle Island.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Saddle Island, the figures in this table only represent information within the Saddle Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - ➤ Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Saddle Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total Inventory		10% (10-yr)		2% (5	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		ed (\$/yr)
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.59 Town of Saint George Summary (CID 230229)

The following pages include Flood Risk data for the Town of Saint George.

3.3.59.1. **Overview**

The information below provides an overview of the Town of Saint George as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of Saint George	230229	2,591	100	25.0	100	Υ	1	Υ

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 49 policies totaling approximately \$11,289,000

Data provided below only includes areas within the Town of Saint George, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.59.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

• Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	Within Floodway N/A		N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Saint George, the figures in this table only represent information within the Town of Saint George.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Saint George, the figures in this table only represent information within the Town of Saint George.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Town of Saint George's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estim	ated Poter	ntial Losses for Flood Event Scenarios						
	Total Inve	entory	10% (10-yr)	2% (50-yr) 1%		1% (1	1% (100-yr)		500-yr)	Annualized (\$/yr)		
	Estimated Value	% of Total	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	
Residential Building/Contents	\$460,500,000	82%	\$5,600,000	1%	\$11,800,000	3%	\$13,100,000	3%	\$22,700,000	5%	\$900,000	0%	
Commercial Building/Contents	\$53,000,000	10%	\$500,000	1%	\$900,000	2%	\$1,200,000	2%	\$2,200,000	4%	\$80,000	0%	
Other Building/Contents	\$43,500,000	8%	\$200,000	1%	\$500,000	1%	\$600,000	1%	\$1,200,000	3%	\$40,000	0%	
Total Building/Contents ²	\$557,100,000	100%	\$6,300,000	1%	\$13,300,000	2%	\$14,900,000	3%	\$26,100,000	5%	\$1,000,000	0%	
Business Disruption ³	\$0	N/A	\$10,000	N/A	\$20,000	N/A	\$20,000	N/A	\$40,000	N/A	\$0	N/A	
TOTAL ⁴	\$557,100,000	N/A	\$6,300,000	1%	\$13,300,000	2%	\$14,900,000	3%	\$26,100,000	5%	\$1,000,000	0%	

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.60 Seal Island Summary (CID 230948)

The following pages include Flood Risk data for the Seal Island.

3.3.60.1. **Overview**

The information below provides an overview of Seal Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Seal Island	230948	0	100	0	100	N	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Seal Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.60.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Seal Island, the figures in this table only represent information within the Seal Island.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Seal Island, the figures in this table only represent information within the Seal Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Seal Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.61 Shag Ledge Summary (CID 230942)

The following pages include Flood Risk data for the Shag Ledge.

3.3.61.1. **Overview**

The information below provides an overview of Shag Ledge as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Shag Ledge	230942	0	100	0	100	Υ	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Shag Ledge, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.61.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Shag Ledge, the figures in this table only represent information within the Shag Ledge.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Shag Ledge, the figures in this table only represent information within the Shag Ledge.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - ➤ Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Shag Ledge's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.62 Town of South Thomaston Summary (CID 230078)

The following pages include Flood Risk data for the Town of South Thomaston.

3.3.62.1. **Overview**

The information below provides an overview of the Town of South Thomaston as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of South Thomaston	230078	1,558	100	11.4	100	Υ	1	Υ

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 21 policies totaling approximately \$4,289,500

Data provided below only includes areas within the Town of South Thomaston, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.62.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of South Thomaston, the figures in this table only represent information within the Town of South Thomaston.

Area of Study		Buildings		Population				
	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of South Thomaston, the figures in this table only represent information within the Town of South Thomaston.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - ➤ Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Town of South Thomaston's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

			Estimated Potential Losses for Flood Event Scenarios									
	Total Inventory		10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$234,100,000	83%	\$2,900,000	1%	\$4,800,000	2%	\$4,500,000	2%	\$8,400,000	4%	\$400,000	0%
Commercial Building/Contents	\$27,600,000	10%	\$200,000	1%	\$300,000	1%	\$500,000	2%	\$500,000	2%	\$20,000	0%
Other Building/Contents	\$19,700,000	7%	\$100,000	1%	\$200,000	1%	\$200,000	1%	\$300,000	1%	\$20,000	0%
Total Building/Contents ²	\$281,400,000	100%	\$3,200,000	1%	\$5,200,000	2%	\$5,200,000	2%	\$9,100,000	3%	\$400,000	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$10,000	N/A	\$10,000	N/A	\$0	N/A
TOTAL ⁴	\$281,400,000	N/A	\$3,200,000	1%	\$5,200,000	2%	\$5,200,000	2%	\$9,200,000	3%	\$400,000	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

3.3.63 Spectacle Island Summary (CID 230963)

The following pages include Flood Risk data for the Spectacle Island.

3.3.63.1. **Overview**

The information below provides an overview of Spectacle Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Spectacle Island	230963	0	100	0	100	Y	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Spectacle Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.63.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)		
Within SFHA	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Spectacle Island, the figures in this table only represent information within the Spectacle Island.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Spectacle Island, the figures in this table only represent information within the Spectacle Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Spectacle Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.64 Tenpound Island Summary (CID 230633)

The following pages include Flood Risk data for the Tenpound Island.

3.3.64.1. **Overview**

The information below provides an overview of Tenpound Island as of the date of this publication.

Community Name	CID	Total I Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Tenpound Island	230633	0	100	0	100	N	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Tenpound Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.64.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Tenpound Island, the figures in this table only represent information within the Tenpound Island.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Tenpound Island, the figures in this table only represent information within the Tenpound Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Tenpound Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.65 The Hogshead Summary (CID 230943)

The following pages include Flood Risk data for the The Hogshead.

3.3.65.1. **Overview**

The information below provides an overview of The Hogshead as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
The Hogshead	230943	0	100	0	100	Y	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within The Hogshead, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.65.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of The Hogshead, the figures in this table only represent information within the The Hogshead.

		Buildings		Population				
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of The Hogshead, the figures in this table only represent information within the The Hogshead.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - ➤ Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

1.5 The Hogshead's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}						
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.66 The Nubble Summary (CID 230933)

The following pages include Flood Risk data for the The Nubble.

3.3.66.1. **Overview**

The information below provides an overview of The Nubble as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
The Nubble	230933	0	100	0	100	Y	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within The Nubble, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.66.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of The Nubble, the figures in this table only represent information within the The Nubble.

Avec of Study		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of The Nubble, the figures in this table only represent information within the The Nubble.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Nubble's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	nventory 10% (10-yr		10-yr)	2% (5	60-yr)	1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.67 Town of Thomaston Summary (CID 230079)

The following pages include Flood Risk data for the Town of Thomaston.

3.3.67.1. **Overview**

The information below provides an overview of the Town of Thomaston as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of Thomaston	230079	2,781	100	10.9	100	Υ	1	Υ

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 9 policies totaling approximately \$3,101,200

Data provided below only includes areas within the Town of Thomaston, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.67.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Thomaston, the figures in this table only represent information within the Town of Thomaston.

Avec of Study		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Thomaston, the figures in this table only represent information within the Town of Thomaston.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Town of Thomaston's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estim	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total Inve	entory	10% (10% (10-yr)		2% (50-yr)		1% (100-yr)		500-yr)	Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$354,000,000	67%	\$1,900,000	1%	\$2,700,000	1%	\$2,500,000	1%	\$3,100,000	1%	\$200,000	0%
Commercial Building/Contents	\$91,400,000	17%	\$200,000	0%	\$300,000	0%	\$300,000	0%	\$500,000	0%	\$30,000	0%
Other Building/Contents	\$79,600,000	16%	\$20,000	0%	\$30,000	0%	\$40,000	0%	\$50,000	0%	\$0	0%
Total Building/Contents ²	\$525,000,000	100%	\$2,100,000	0%	\$3,000,000	1%	\$2,800,000	1%	\$3,600,000	1%	\$200,000	0%
Business Disruption ³	\$0	N/A	\$10,000	N/A	\$10,000	N/A	\$10,000	N/A	\$10,000	N/A	\$0	N/A
TOTAL ⁴	\$525,000,000	N/A	\$2,100,000	0%	\$3,000,000	1%	\$2,900,000	1%	\$3,600,000	1%	\$200,000	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

 Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how they are defined for this analysis, and potential mitigation actions that could be considered for each type. The table below summarizes the number of areas of mitigation interest by type.

Type of Mitigation Interest	Number of Areas	Data Source
Significant Land Use Change	1	Town of Thomaston

 A Significant Land Use Change was determined to have happened in the vicinity of Lowe's Home Improvement retail facility. A retention pond was constructed resulting in no further flooding in the area.



3.3.68 Two Bush Island Summary (CID 230477)

The following pages include Flood Risk data for the Two Bush Island.

3.3.68.1. **Overview**

The information below provides an overview of Two Bush Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Two Bush Island	230477	0	100	0	100	N	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Two Bush Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.68.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Two Bush Island, the figures in this table only represent information within the Two Bush Island.

Avec of Study		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Two Bush Island, the figures in this table only represent information within the Two Bush Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Two Bush Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

				Estimated Potential Loss					l Losses for Flood Event Scenarios					
	Total Inventory		10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)			
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}		
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%		
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%		
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%		
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%		
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A		
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%		

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.69 Town of Union Summary (CID 230080)

The following pages include Flood Risk data for the Town of Union.

3.3.69.1. **Overview**

The information below provides an overview of the Town of Union as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of Union	230080	2,259	100	32.2	100	Υ	1	Υ

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 8 policies totaling approximately \$1,381,200

Data provided below only includes areas within the Town of Union, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.69.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

• Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Union, the figures in this table only represent information within the Town of Union.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Union, the figures in this table only represent information within the Town of Union.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate
 these and other areas where flood mitigation potential is high. The FRD includes data which may
 be helpful in planning and implementing mitigation strategies. Properties located in areas
 expected to experience some depth of water should seriously consider mitigation options for
 implementation.

Hazus Estimated Loss Information

The Town of Union's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

				Estimated Poten				ntial Losses for Flood Event Scenarios					
	Total Inve	entory	10% (10-yr)	2% (5	60-yr)	1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)		
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	
Residential Building/Contents	\$319,300,000	76%	\$0	0%	\$4,200,000	1%	\$4,600,000	1%	\$5,000,000	2%	\$0	0%	
Commercial Building/Contents	\$47,500,000	12%	\$0	0%	\$800,000	2%	\$1,000,000	2%	\$1,100,000	2%	\$0	0%	
Other Building/Contents	\$51,900,000	12%	\$0	0%	\$700,000	1%	\$800,000	2%	\$900,000	2%	\$0	0%	
Total Building/Contents ²	\$418,700,000	100%	\$0	0%	\$5,800,000	1%	\$6,400,000	2%	\$7,000,000	2%	\$0	0%	
Business Disruption ³	\$0	N/A	\$0	N/A	\$20,000	N/A	\$20,000	N/A	\$20,000	N/A	\$0	N/A	
TOTAL⁴	\$418,700,000	N/A	\$0	0%	\$5,800,000	1%	\$6,400,000	2%	\$7,000,000	2%	\$0	0%	

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

 Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how they are defined for this analysis, and potential mitigation actions that could be considered for each type. The table below summarizes the number of areas of mitigation interest by type.

Type of Mitigation Interest	Number of Areas	Data Source
Dam	1	Town of Appleton, Code Enforcement Officer
Dam	2	US Army Corps of Engineers
NP	10	US Army Corps of Engineers
Streamflow Constrictions	2	US Army Corps of Engineers

- Three dams were identified as Areas of Mitigation Interest due to a lack of an Emergency Action Plan. The dams mentioned are East Union Dam, Mill Street Dam and a dam construction eight to ten years ago to help control flooding from Sennebec Pond.
- o One culvert was identified by US Army Corps of Engineers due to culvert being replaced.



- o Another culvert was identified due to steep banks and the culvert being partially collapsed.
- Two other culverts were identified due to very steep banks.



Two culverts were identified due to the culvert base being rusted away.



 Six additional culverts were identified as Areas of Mitigation Interest by the US Army Corps of Engineers.

3.3.70 Town of Vinalhaven Summary (CID 230230)

The following pages include Flood Risk data for the Town of Vinalhaven.

3.3.70.1. **Overview**

The information below provides an overview of the Town of Vinalhaven as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of Vinalhaven	230230	1,165	100	23.5	100	Y	1	Υ

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 15 policies totaling approximately \$3,947,500

Data provided below only includes areas within the Town of Vinalhaven, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.70.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

• Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Vinalhaven, the figures in this table only represent information within the Town of Vinalhaven.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Vinalhaven, the figures in this table only represent information within the Town of Vinalhaven.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Town of Vinalhaven's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estim	ated Poter	ntial Losses for Flood Event Scenarios					
	Total Inve	entory	10% (10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		ed (\$/yr)
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$254,200,000	90%	\$7,100,000	3%	\$7,700,000	3%	\$11,300,000	4%	\$16,500,000	6%	\$800,000	0%
Commercial Building/Contents	\$19,600,000	7%	\$400,000	2%	\$500,000	3%	\$700,000	3%	\$1,100,000	6%	\$40,000	0%
Other Building/Contents	\$8,500,000	3%	\$200,000	2%	\$200,000	3%	\$300,000	3%	\$400,000	5%	\$20,000	0%
Total Building/Contents ²	\$282,300,000	100%	\$7,700,000	3%	\$8,500,000	3%	\$12,200,000	4%	\$18,000,000	6%	\$900,000	0%
Business Disruption ³	\$0	N/A	\$10,000	N/A	\$10,000	N/A	\$10,000	N/A	\$20,000	N/A	\$0	N/A
TOTAL ⁴	\$282,300,000	N/A	\$7,700,000	3%	\$8,500,000	3%	\$12,200,000	4%	\$18,000,000	6%	\$900,000	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.71 Town of Warren Summary (CID 230081)

The following pages include Flood Risk data for the Town of Warren.

3.3.71.1. **Overview**

The information below provides an overview of the Town of Warren as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of Warren	230081	4,751	100	46.5	100	Y	1	Υ

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 6 policies totaling approximately \$1,494,700

Data provided below only includes areas within the Town of Warren, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.71.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

• Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Warren, the figures in this table only represent information within the Town of Warren.

Area of Study		Buildings		Population				
	Increase	Decrease	Net Change	Increase	Decrease	Net Change		
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A		
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A		

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Warren, the figures in this table only represent information within the Town of Warren.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Town of Warren's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

			Estimated Potential Losses for Flood Event Scenarios									
	Total Inventory		10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$444,800,000	70%	\$5,000,000	1%	\$6,900,000	2%	\$7,500,000	2%	\$9,800,000	2%	\$600,000	0%
Commercial Building/Contents	\$93,000,000	15%	\$1,700,000	2%	\$2,100,000	2%	\$2,400,000	3%	\$2,800,000	3%	\$200,000	0%
Other Building/Contents	\$92,000,000	15%	\$2,300,000	2%	\$2,900,000	3%	\$3,200,000	4%	\$3,900,000	4%	\$300,000	0%
Total Building/Contents ²	\$629,700,000	100%	\$9,000,000	1%	\$11,900,000	2%	\$13,100,000	2%	\$16,500,000	3%	\$1,000,000	0%
Business Disruption ³	\$0	N/A	\$20,000	N/A	\$30,000	N/A	\$40,000	N/A	\$50,000	N/A	\$0	N/A
TOTAL ⁴	\$629,700,000	N/A	\$9,000,000	1%	\$11,900,000	2%	\$13,200,000	2%	\$16,600,000	3%	\$1,000,000	0%

¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

• Areas of Mitigation Interest

 Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how they are defined for this analysis, and potential mitigation actions that could be considered for each type. The table below summarizes the number of areas of mitigation interest by type.

Type of Mitigation Interest	Number of Areas	Data Source
NP	2	US Army Corps of Engineers
Streamflow Constrictions	1	US Army Corps of Engineers

 One culvert was identified by the US Army Corps of Engineers as an Area of Mitigation Interest due to the culvert being perched and blocked.



o Two additional culverts were also identified as Areas of Mitigation Interest.

3.3.72 Town of Washington Summary (CID 230082)

The following pages include Flood Risk data for the Town of Washington.

3.3.72.1. **Overview**

The information below provides an overview of the Town of Washington as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Town of Washington	230082	1,527	100	38.0	100	Y	1	Υ

- Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.
- National Flood Insurance Program (NFIP) policy coverage (policies/values) = 1 policies totaling approximately \$105,000

Data provided below only includes areas within the Town of Washington, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.72.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Washington, the figures in this table only represent information within the Town of Washington.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

The table below summarizes the increases, decreases, and net change of affected structures and population for the community.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Town of Washington, the figures in this table only represent information within the Town of Washington.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate
 these and other areas where flood mitigation potential is high. The FRD includes data which may
 be helpful in planning and implementing mitigation strategies. Properties located in areas
 expected to experience some depth of water should seriously consider mitigation options for
 implementation.

Hazus Estimated Loss Information

The Town of Washington's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estim	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total Inve	entory	10% (10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		ed (\$/yr)
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$170,300,000	81%	\$600,000	0%	\$800,000	0%	\$900,000	1%	\$1,100,000	1%	\$70,000	0%
Commercial Building/Contents	\$26,300,000	12%	\$90,000	0%	\$100,000	0%	\$100,000	0%	\$200,000	1%	\$10,000	0%
Other Building/Contents	\$14,800,000	7%	\$50,000	0%	\$60,000	0%	\$70,000	0%	\$80,000	1%	\$10,000	0%
Total Building/Contents ²	\$211,300,000	100%	\$700,000	0%	\$1,000,000	0%	\$1,100,000	1%	\$1,300,000	1%	\$80,000	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$10,000	N/A	\$0	N/A
TOTAL ⁴	\$211,300,000	N/A	\$700,000	0%	\$1,000,000	0%	\$1,100,000	1%	\$1,300,000	1%	\$80,000	0%

Source: Hazus analysis results stored as the Flood Risk Assessment Dataset in the Flood Risk Database.

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¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

Areas of Mitigation Interest

 Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how they are defined for this analysis, and potential mitigation actions that could be considered for each type. The table below summarizes the number of areas of mitigation interest by type.

Type of Mitigation Interest	Number of Areas	Data Source
NP	1	US Army Corps of Engineers
Streamflow Constrictions	1	US Army Corps of Engineers

 One culvert was identified as an Area of Mitigation Interest by the US Army Corps of Engineers due to the culvert having unstable fill and the gravel being washed out.



o An additional culvert was also identified.

3.3.73 Wheaton Island Summary (CID 230456)

The following pages include Flood Risk data for the Wheaton Island.

3.3.73.1. **Overview**

The information below provides an overview of Wheaton Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Wheaton Island	230456	0	100	0	100	N	1	Y

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Wheaton Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.73.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)	
Within SFHA	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Wheaton Island, the figures in this table only represent information within the Wheaton Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

The table below summarizes the increases, decreases, and net change of affected structures and population for the community.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Wheaton Island, the figures in this table only represent information within the Wheaton Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Wheaton Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$400,000	100%	\$60,000	15%	\$90,000	23%	\$100,000	25%	\$100,000	25%	\$10,000	2%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$400,000	100%	\$60,000	15%	\$90,000	23%	\$100,000	25%	\$100,000	25%	\$10,000	2%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$400,000	N/A	\$60,000	15%	\$90,000	23%	\$100,000	25%	\$100,000	25%	\$10,000	2%

Source: Hazus analysis results stored as the Flood Risk Assessment Dataset in the Flood Risk Database.

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¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

• Areas of Mitigation Interest

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.74 Wheeler Big Rock Summary (CID 230939)

The following pages include Flood Risk data for the Wheeler Big Rock.

3.3.74.1. **Overview**

The information below provides an overview of Wheeler Big Rock as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Wheeler Big Rock	230939	0	100	0	100	Y	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Wheeler Big Rock, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.74.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Wheeler Big Rock, the figures in this table only represent information within the Wheeler Big Rock.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

The table below summarizes the increases, decreases, and net change of affected structures and population for the community.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Wheeler Big Rock, the figures in this table only represent information within the Wheeler Big Rock.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate
 these and other areas where flood mitigation potential is high. The FRD includes data which may
 be helpful in planning and implementing mitigation strategies. Properties located in areas
 expected to experience some depth of water should seriously consider mitigation options for
 implementation.

Hazus Estimated Loss Information

The Wheeler Big Rock's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total In	ventory	10% (10-yr)		2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%

Source: Hazus analysis results stored as the Flood Risk Assessment Dataset in the Flood Risk Database.

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¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

• Areas of Mitigation Interest

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.75 Wooden Ball Island Summary (CID 230950)

The following pages include Flood Risk data for the Wooden Ball Island.

3.3.75.1. **Overview**

The information below provides an overview of Wooden Ball Island as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Wooden Ball Island	230950	0	100	0	100	N	1	Υ

Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Wooden Ball Island, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.75.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Wooden Ball Island, the figures in this table only represent information within the Wooden Ball Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

The table below summarizes the increases, decreases, and net change of affected structures and population for the community.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Wooden Ball Island, the figures in this table only represent information within the Wooden Ball Island.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Wooden Ball Island's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	Event Scer	narios		
	Total Inventory		10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)	
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}								
Residential Building/Contents	\$200,000	100%	\$10,000	5%	\$20,000	10%	\$20,000	10%	\$30,000	15%	\$0	0%
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Total Building/Contents ²	\$200,000	100%	\$10,000	5%	\$20,000	10%	\$20,000	10%	\$30,000	15%	\$0	0%
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A
TOTAL ⁴	\$200,000	N/A	\$10,000	5%	\$20,000	10%	\$20,000	10%	\$30,000	15%	\$0	0%

Source: Hazus analysis results stored as the Flood Risk Assessment Dataset in the Flood Risk Database.

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¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

• Areas of Mitigation Interest

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

3.3.76 Yellow Ledge Summary (CID 230981)

The following pages include Flood Risk data for the Yellow Ledge.

3.3.76.1. **Overview**

The information below provides an overview of Yellow Ledge as of the date of this publication.

Community Name	CID	Total Community Population	Percent of Population in Watershed	Total Community Land Area (sq mi)	Percent of Land Area in Watershed	NFIP	CRS Rating	Mitigation Plan
Yellow Ledge	230981	0	100	0	100	N	1	Y

• Participating in Hazard Mitigation Plan Knox County, Maine, which expires on 2/5/2018.

Data provided below only includes areas within Yellow Ledge, that area located within Knox County, and do not necessarily represent community-wide totals. Section 2 of the Flood Risk Report (FRR) provides more information regarding the source and methodology used to develop the information presented below. Datasets used toward the generation of results of this project are described in Section 7 of the FRR and are found in the Flood Risk Database (FRD).

3.3.76.2. Community Analyses and Results

Results for each of the Flood Risk Datasets developed for this Flood Risk Project are summarized below:

Changes Since Last FIRM

o Changes Since Last FIRM was not performed for this community.

The table below summarizes the increases, decreases, and net change of SFHAs for the community.

Area of Study	Total Area (mi²)	Increase (mi²)	Decrease (mi²)	Net Change (mi²)
Within SFHA	N/A	N/A	N/A	N/A
Within Floodway	N/A	N/A	N/A	N/A

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Yellow Ledge, the figures in this table only represent information within the Yellow Ledge.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

The table below summarizes the increases, decreases, and net change of affected structures and population for the community.

		Buildings		Population			
Area of Study	Increase	Decrease	Net Change	Increase	Decrease	Net Change	
Within SFHA	N/A	N/A	N/A	N/A	N/A	N/A	
Within Floodway	N/A	N/A	N/A	N/A	N/A	N/A	

^{*}Although the Flood Risk Database may contain Changes Since Last FIRM information outside of Yellow Ledge, the figures in this table only represent information within the Yellow Ledge.

Section 2 of this report provides more information regarding the source and methodology used to develop this table.

Flood Depth and Analysis Grids

- See the FRD for the following depth and analysis grid data (Section 2 of the FRR provides general information regarding the development of and potential uses for this data):
 - Coastal Depth Grids (1-percent-annual-chance flood events)
 - ➤ Wave Height Grids (1-percent-annual-chance flood events)
- Additional information and data layers provided within the FRD should be used to further isolate these and other areas where flood mitigation potential is high. The FRD includes data which may be helpful in planning and implementing mitigation strategies. Properties located in areas expected to experience some depth of water should seriously consider mitigation options for implementation.

Hazus Estimated Loss Information

The Yellow Ledge's flood risk analysis uses results from a FEMA-performed Hazus analysis which accounts for newly modeled areas in the Flood Risk Project and newly modeled depths for certain flood events. Potential losses were compared with locally provided tax data to estimate loss ratios for multiple scenarios. Additional information and data layers provided within the FRD should be used to further analyze potential losses and areas where they are likely to occur.

					Estima	ated Poter	ntial Losses	for Flood	l Event Scenarios					
	Total Inventory		10% (10-yr)	2% (50-yr)		1% (100-yr)		0.2% (500-yr)		Annualized (\$/yr)			
	Estimated Value	% of Total	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}	Dollar Losses⁵	Loss Ratio ^{1,6}	Dollar Losses ⁵	Loss Ratio ^{1,6}		
Residential Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%		
Commercial Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%		
Other Building/Contents	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%		
Total Building/Contents ²	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%		
Business Disruption ³	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A	\$0	N/A		
TOTAL ⁴	\$0	N/A	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%		

Source: Hazus analysis results stored as the Flood Risk Assessment Dataset in the Flood Risk Database.

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¹Loss ratio = Dollar Losses / Estimated Value

²Total Building/Contents Loss = Residential Building/Contents Loss + Commercial Building/Contents Loss + Other Building/Contents Loss.

³Business Disruption = Inventory Loss + Relocation Cost + Income Loss + Rental Income Loss + Wage Loss + Direct Output Loss.

⁴Total Loss = Total Building/Contents + Business Disruption

⁵Losses shown are rounded to nearest \$10,000 for values under \$100,000 and to the nearest \$100,000 for values over \$100,000.

⁶Loss Ratios rounded to nearest integer percent.

• Areas of Mitigation Interest

Section 2.2.4 of the FRR provides more information regarding areas of mitigation interest, how
they are defined for this analysis, and potential mitigation actions that could be considered for
each type. The table below summarizes the number of areas of mitigation interest by type.

4 Actions to Reduce Flood Risk

In order to fully leverage the Flood Risk Datasets and Products created for this Flood Risk Project, local stakeholders should consider many different flood risk mitigation tactics, including, but not limited the items shown in the sub-sections below.

4.1 Types of Mitigation Actions

Mitigation provides a critical foundation on which to reduce loss of life and property by avoiding or lessening the impact of hazard events. This creates safer communities and facilitates resiliency by enabling communities to return to normal function as quickly as possible after a hazard event. Once a community understands its flood risk, it is in a better position to identify potential mitigation actions that can reduce the risk to its people and property.

The mitigation plan requirements in 44 CFR Part 201 encourage communities to understand their vulnerability to hazards and take actions to minimize vulnerability and promote resilience. Flood mitigation actions generally fall into the following categories:

4.1.1 Preventative Measures

Preventative measures are intended to keep flood hazards from getting worse. They can reduce future vulnerability to flooding, especially in areas where development has not yet occurred or where capital improvements have not been substantial. Examples include:

- Comprehensive land use planning
- Zoning regulations
- Subdivision regulations
- Open space preservation
- Building codes
- Floodplain development regulations
- Stormwater management
- Purchase development rights or conservation easements
- Participation in the NFIP Community Rating System (CRS)

4.1.2 Property Protection Measures

Property protection measures protect existing buildings by modifying the building to withstand floods, or by removing buildings from hazardous locations. Examples include:

Before Mitigation and After Mitigation





Communities will need to prioritize projects as part of the planning process. FEMA can then help route federal mitigation dollars to fund these projects.

NFIP's CRS is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from community actions meeting the three goals of the CRS: to reduce flood losses, to facilitate accurate insurance rating, and to promote the awareness of flood insurance.

For CRS participating communities, flood insurance premium rates are discounted in increments of 5%; i.e., a Class 1 community would receive a 45% premium discount, while a Class 9 community would receive a 5% discount. (A Class 10 is not participating in the CRS and receives no discount.)

- Building relocation
- Acquisition and clearance
- Building elevation
- Barrier installation
- Building retrofit

4.1.3 Natural Resource Protection Activities

Natural resource protection activities reduce the impact of floods by preserving or restoring natural areas such as floodplains, wetlands, and dunes and their natural functions. Examples include:

- Wetland protection
- Habitat protection
- Erosion and sedimentation control
- Best management practices (BMP)
- Prevention of stream dumping activities (anti-litter campaigns)
- Improved forestry practices such as reforesting or selective timbering (extraction)

4.1.4 Structural Mitigation Projects

Structural mitigation projects lessen the impact of floods by modifying the environmental natural progression of the flooding event. Structural protection such as upgrading dams/levees for already existing development and critical facilities may be a realistic alternative. However, citizens should be made aware of their residual risk. Examples include:

- Reservoirs, retention, and detention basins
- Levees and floodwalls
- Channel modifications
- Channel maintenance

4.1.5 Public Education and Awareness Activities

Public education and awareness activities advise residents, business owners, potential property buyers, and visitors about floods, hazardous areas, and mitigation techniques they can use to reduce the flood risk to themselves and their property. Examples include:

- Readily available and readable updated maps
- Outreach projects
- Libraries

- Technical assistance
- Real estate disclosure
- Environmental education
- Risk information via the nightly news

4.1.6 Emergency Service Measures

Although not typically considered a mitigation technique, emergency service measures minimize the impact of flooding on people and property. These are actions commonly taken immediately prior to, during, or in response to a hazard event. Examples include:

- Hazard warning system
- Emergency response plan
- COOP and COG planning
- Critical facilities protection
- Health and safety maintenance
- Post flood recovery planning

In Section 3, specific AoMIs were identified. Table 4.1 below identifies possible mitigation actions for each AoMI to consider.

Table 4-1. Mitigation Actions for Areas of Mitigation Interest

AoMI	Possible Actions to Reduce Flood Risk
Dams	Engineering assessment Dam upgrades and strengthening Emergency Action Plan Dam removal Easement creation in impoundment and downstream inundation areas
Levees (accredited and non-accredited) and significant levee- like structures	Generally same as dams above Purchase of flood insurance for at-risk structures
Coastal Structures Jetties Groynes Seawalls Other structures	Increase coastal setbacks for construction Habitat restoration programs Wetland restoration and mitigation banking programs
Stream Flow Pinch Point Undersized culverts or bridge openings	Engineering analysis Replacement of structure pre- and post-disaster
Past Claims and IA/PA Hot Spots	Acquisition Elevation Relocation Floodproofing

For more information regarding hazard mitigation techniques, best practices, and potential grant funding sources, visit www.fema.gov or contact your local floodplain manager, emergency manager, or State Hazard Mitigation Officer.

AoMI	Possible Actions to Reduce Flood Risk
Major Land Use Changes (past 5 years or next 5 years)	Higher regulatory standard Stormwater BMPs Transfer of Development rights Compensatory storage and equal conveyance standards
Key Emergency Routes Overtopped During Frequent Flooding Events	Elevation Creation of alternate routes Design as low water crossing
Areas of Significant Riverine or Coastal Erosion	Relocation of buildings and infrastructure Regulations and planning Natural vegetation Hardening
Drainage or Stormwater- Based Flood Hazard Areas, or Areas Not Identified as Floodprone on the FIRM But Known to be Inundated	Identification of all flood hazard areas
Areas of Mitigation Success	N/A

4.2 Identifying Specific Actions for Your Community

As many mitigation actions are possible to lessen the impact of floods, how can a community decide which ones are appropriate to implement? There are many ways to identify specific actions most appropriate for a community. Some factors to consider may include the following:

- **Site characteristics.** Does the site present unique challenges (e.g., significant slopes or erosion potential)?
- **Flood characteristics.** Are the flood waters affecting the site fast or slow moving? Is there debris associated with the flow? How deep is the flooding?
- **Social acceptance.** Will the mitigation action be acceptable to the public? Does it cause social or cultural problems?
- **Technical feasibility.** Is the mitigation action technically feasible (e.g., making a building watertight to a reasonable depth)?
- Administrative feasibility. Is there administrative capability to implement the mitigation action?
- Legal. Does the mitigation action meet all applicable codes, regulations, and laws? Public officials may have a legal responsibility to act and inform citizens if a known hazard has been identified.
- Economic. Is the mitigation action affordable? Is it eligible under grant or other funding programs? Can it be completed within existing budgets?

Refer to FEMA Mitigation Planning
How To Guide N/A3 (FEMA 386-3)
"Developing the Mitigation Plan Identifying Mitigation Actions and
Implementation Strategies" for more
information on how to identify
specific mitigation actions to
address hazard risk in your
community.

FEMA in collaboration with the American Planning Association has released the publication, "Integrating Hazard Mitigation into Local Planning." This guide explains how hazard mitigation can be incorporated into several different types of local planning programs. For more information go to www.planning.org. or http://www.fema.gov/library.

• **Environmental.** Does the mitigation action cause adverse impacts on the environment or can they be mitigated? Is it the most appropriate action among the possible alternatives?

Your local Hazard Mitigation Plan is a valuable place to identify and prioritize possible mitigation actions. The plan includes a mitigation strategy with mitigation actions that were developed through a public and open process. You can then add to or modify those actions based on what is learned during the course of the Risk MAP project and the information provided within this FRR.

4.3 Mitigation Programs and Assistance

Not all mitigation activities require funding (e.g., local policy actions such as strengthening a flood damage prevention ordinance), and those that do are not limited to outside funding sources (e.g., inclusion in local capital improvements plan, etc.). For those mitigation actions that require assistance through funding or technical expertise, several state and federal agencies have flood hazard mitigation grant programs and offer technical assistance. These programs may be funded at different levels over time or may be activated under special circumstances such as after a presidential disaster declaration.



Communities can link hazard mitigation plans and actions to the right FEMA grant programs to fund flood risk reduction. More information about FEMA HMA programs can be found at http://www.fema.gov/government/grant/hma/index.shtm.

4.3.1 FEMA Mitigation Programs and Assistance

FEMA awards many mitigation grants each year to states and communities to undertake mitigation projects to prevent future loss of life and property resulting from hazard impacts, including flooding. The FEMA Hazard Mitigation Assistance (HMA) programs provide grants for mitigation through the programs listed in Table 4.2 below.

Table 4-2. FEMA Hazard Mitigation Assistance Programs

Mitigation Grant Program	Authorization	Purpose
Hazard Mitigation Grant Program (HMGP)	Robert T. Stafford Disaster Relief and Emergency Assistance Act	Activated after a presidential disaster declaration; provides funds on a sliding scale formula based on a percentage of the total federal assistance for a disaster for long-term mitigation measures to reduce vulnerability to natural hazards
Flood Mitigation Assistance (FMA)	National Flood Insurance Reform Act	Reduce or eliminate claims against the NFIP
Pre-Disaster Mitigation (PDM)	Disaster Mitigation Act	National competitive program focused on mitigation project and planning activities that address multiple natural hazards
Repetitive Flood Claims (RFC)	Bunning-Bereuter- Blumenauer Flood Insurance Reform Act	Reduce flood claims against the NFIP through flood mitigation; properties must be currently NFIP insured and have had at least one NFIP claim

Mitigation Grant Program	Authorization	Purpose
Severe Repetitive Loss (SRL)	Bunning-Bereuter- Blumenauer Flood Insurance Reform Act	Reduce or eliminate the long-term risk of flood damage to SRL residential structures currently insured under the NFIP

The HMGP and PDM programs offer funding for mitigation planning and project activities that address multiple natural hazard events. The FMA, RFC, and SRL programs focus funding efforts on reducing claims against the NFIP. Funding under the HMA programs is subject to availability of annual appropriations, and HMGP funding is also subject to the amount of FEMA disaster recovery assistance provided under a presidential major disaster declaration.

FEMA's HMA grants are awarded to eligible states, tribes, and territories (applicant) that, in turn, provide subgrants to local governments and communities (subapplicant). The applicant selects and prioritizes subapplications developed and submitted to them by subapplicants and submits them to FEMA for funding consideration. Prospective subapplicants should consult the office designated as their applicant for further information regarding specific program and application requirements. Contact information for the FEMA Regional Offices and State Hazard Mitigation Officers (SHMO) is available on the FEMA website (www.fema.gov).

4.3.2 Additional Mitigation Programs and Assistance

Several additional agencies including USACE, Natural Resource Conservation Service (NRCS), U.S. Geological Survey (USGS), and others have specialists on staff and can offer further information on flood hazard mitigation. The State NFIP Coordinator and SHMO are state-level sources of information and assistance, which vary among different states.

The Silver Jackets program, active in several states, is a partnership of USACE, FEMA, and state agencies. The Silver Jackets program provides a state-based strategy for an interagency approach to planning and implementing measures for risk reduction.

5 Acronyms and Definitions

5.1 Acronyms

Α

AAL Average Annualized Loss
ALR Annualized Loss Ratio
AoMI Areas of Mitigation Interest

В

BCA Benefit-Cost Analysis
BFE Base Flood Elevation

BMP Best Management Practices

C

CFR Code of Federal Regulations
COG Continuity of Government Plan
COOP Continuity of Operations Plan
CRS Community Rating System
CSLF Changes Since Last FIRM

D

DHS Department of Homeland Security
DMA 2000 Disaster Mitigation Act of 2000

E

EOP Emergency Operations Plan

F

FEMA Federal Emergency Management Agency

FIRM Flood Insurance Rate Map
FIS Flood Insurance Study
FMA Flood Mitigation Assistance

FRD Flood Risk Database FRM Flood Risk Map FRR Flood Risk Report

FY Fiscal Year

G

GIS Geographic Information System

Н

HMA Hazard Mitigation Assistance HMGP Hazard Mitigation Grant Program

IA Individual Assistance

N

NFIA National Flood Insurance Act
NFIP National Flood Insurance Program
NRCS Natural Resource Conservation Service

P

PA Public Assistance
PDM Pre-Disaster Mitigation

R

RFC Repetitive Flood Claims

Risk MAP Mapping, Assessment, and Planning

S

SFHA Special Flood Hazard Area
SHMO State Hazard Mitigation Officer

SRL Severe Repetitive Loss

U

USACE U.S. Army Corps of Engineers

USGS U.S. Geological Survey

5.2 Definitions

0.2-percent-annual-chance flood – The flood elevation that has a 0.2-percent chance of being equaled or exceeded each year. Sometimes referred to as the 500-year flood.

1-percent-annual-chance flood – The flood elevation that has a 1-percent chance of being equaled or exceeded each year. Sometimes referred to as the 100-year flood.

Annualized Loss Ratio (ALR) – Expresses the annualized loss as a fraction of the value of the local inventory (total value/annualized loss).

Average Annualized Loss (AAL) – The estimated long-term weighted average value of losses to property in any single year in a specified geographic area.

Base Flood Elevation (BFE) – Elevation of the 1-percent-annual-chance flood. This elevation is the basis of the insurance and floodplain management requirements of the NFIP.

Berm – A small levee, typically built from earth.

Cfs – Cubic feet per second, the unit by which discharges are measured (a cubic foot of water is about 7.5 gallons).

Consequence (of flood) – The estimated damages associated with a given flood occurrence.

Crest – The peak stage or elevation reached or expected to be reached by the floodwaters of a specific flood at a given location.

Dam – An artificial barrier that has the ability to impound water, wastewater, or any liquid-borne material, for the purpose of storage or control of water.

Design flood event – The greater of the following two flood events: (1) the base flood, affecting those areas identified as SFHAs on a community's FIRM; or (2) the flood corresponding to the area designated as a flood hazard area on a community's flood hazard map or otherwise legally designated.

Erosion – Process by which floodwaters lower the ground surface in an area by removing upper layers of soil.

Essential facilities – Facilities that, if damaged, would present an immediate threat to life, public health, and safety. As categorized in Hazus, essential facilities include hospitals, emergency operations centers, police stations, fire stations, and schools.

Flood – A general and temporary condition of partial or complete inundation of normally dry land areas from (1) the overflow of inland or tidal waters or (2) the unusual and rapid accumulation or runoff of surface waters from any source.

Flood Insurance Rate Map (FIRM) – An official map of a community, on which FEMA has delineated both the SFHAs and the risk premium zones applicable to the community. See also Digital Flood Insurance Rate Map.

Flood Insurance Study (FIS) Report – Contains an examination, evaluation, and determination of the flood hazards of a community, and if appropriate, the corresponding water-surface elevations.

Flood risk – Probability multiplied by consequence; the degree of probability that a loss or injury may occur as a result of flooding. Sometimes referred to as flood vulnerability.

Flood vulnerability – Probability multiplied by consequence; the degree of probability that a loss or injury may occur as a result of flooding. Sometimes referred to as flood risk.

Floodborne debris impact – Floodwater moving at a moderate or high velocity can carry floodborne debris that can impact buildings and damage walls and foundations.

Floodwall – A long, narrow concrete or masonry wall built to protect land from flooding.

Floodway (regulatory) – The channel of a river or other watercourse and that portion of the adjacent floodplain that must remain unobstructed to permit passage of the base flood without cumulatively increasing the water surface elevation more than a designated height (usually 1 foot).

Floodway fringe – The portion of the SFHA that is outside of the floodway.

Freeboard – A factor of safety usually expressed in feet above a flood level for purposes of flood plain management. "Freeboard" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed (44CFR§59.1).

Hazus – A GIS-based risk assessment methodology and software application created by FEMA and the National Institute of Building Sciences for analyzing potential losses from floods, hurricane winds and storm surge, and earthquakes.

High velocity flow – Typically comprised of floodwaters moving faster than 5 feet per second.

Levee – A human-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding. (44CFR§59.1)

Loss ratio – Expresses loss as a fraction of the value of the local inventory (total value/loss).

Mudflow – Mudslide (i.e., mudflow) describes a condition where there is a river, flow or inundation of liquid mud down a hillside usually as a result of a dual condition of loss of brush cover, and the subsequent accumulation of water on the ground preceded by a period of unusually heavy or sustained rain. A mudslide (i.e., mudflow) may occur as a distinct phenomenon while a landslide is in progress, and will be recognized as such by the Administrator only if the mudflow, and not the landslide, is the proximate cause of damage that occurs. (44CFR§59.1)

Probability (of flood) – The likelihood that a flood will occur in a given area.

Risk MAP – Risk Mapping, Assessment, and Planning, a FEMA strategy to work collaboratively with state, local, and tribal entities to deliver quality flood data that increases public awareness and leads to action that reduces risk to life and property.

Riverine – Of or produced by a river. Riverine floodplains have readily identifiable channels.

Special Flood Hazard Area (SFHA) – Portion of the floodplain subject to inundation by the 1-percentannual or base flood.

Stafford Act – Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 100-707, signed into law November 23, 1988; amended the Disaster Relief Act of 1974, PL 93-288. This Act constitutes the statutory authority for most federal disaster response activities especially as they pertain to FEMA and FEMA programs.

Stillwater – Projected elevation that flood waters would assume, referenced to National Geodetic Vertical Datum of 1929, North American Vertical Datum of 1988, or other datum, in the absence of waves resulting from wind or seismic effects.

Stream Flow Constrictions – A point where a human-made structure constricts the flow of a river or stream.

6 Additional Resources

ASCE 7 – National design standard issued by the American Society of Civil Engineers (ASCE), *Minimum Design Loads for Buildings and Other Structures*, which gives current requirements for dead, live, soil, flood, wind, snow, rain, ice, and earthquake loads, and their combinations, suitable for inclusion in building codes and other documents.

ASCE 24-05 – National design standard issued by the ASCE, *Flood Resistant Design and Construction*, which outlines the requirements for flood resistant design and construction of structures in flood hazard areas.

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7 Data Used to Develop Flood Risk Products

GIS base map information was acquired from the following sources:

- AECOM
- Atkins
- Federal Emergency Management Agency
- Maine Office of Geographic Information Systems (MEGIS)
- U.S. Census Bureau
- U.S. Geological Survey
- US Army Corps of Engineers
- USDA Natural Resources Conservation Service

Engineering study information was leveraged from the USGS with coordination from the State of Maine Department of Natural Resources Floodplain Management Program. Mitigation Plans and AoMI information were acquired from local community input as well as significant input from the State of Maine Emergency Management Agency.